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ABSTRACT

An instrument was developed to assess principal leadership. Two studies were then conducted to assess the reliability, validity, and utility of the instrument. Leadership style is the relative intensity of the presence of four modes of authority (traditional, charismatic, legal, and expert authority) and four modes of power (moral, psychological, contractual, and technical power) in leader action. The developed instrument--the "Principal Leadership Profile" (PLP)--contains 34 assessment items and 14 demographic questions. In the initial study--a test of assessor reliability and construct validity--experienced and novice principals (from elementary, middle/junior high, and high schools) were assessed by six teams, each with a teacher, a principal, and a central office administrator. In all, 12 elementary, 9 middle, and 12 high school principals participated; and 6 teachers, 7 principals, and 5 central office administrators evaluated them. A second study, of interrater reliability, used 4 videotaped candidates and 28 volunteer assessors, all educators. Assessor reliability was relatively high, as was construct validity. A moderate level of interrater reliability was found. With further development, the instrument holds promise for assessing the leadership of school principals. Fifteen figures and five data tables conclude the document. The PLP and the questionnaire for assessors are appended. (SLD)

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LEADERSHIP PROFILES: AN INSTRUMENT TO ASSESS LEADERSHIP STYLES OF SCHOOL PRINCIPALS

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LEADERSHIP PROFILES: AN INSTRUMENT TO ASSESS LEADERSHIP STYLES OF SCHOOL PRINCIPALS

Introduction

The idea of leadership has fascinated western society in general and scholars in particular at least since the publication of Niccolo Machiavelli's The Prince in 1532. Most scholars regard Machiavelli's work as the first systematic study of what the conduct of leaders is rather than what the conduct of leaders ought to be. Within the study of leadership, educational leadership has been a consistent research theme of scholars and a perennial concern to practitioners. Although educational leadership has continued to be a research theme, the level of research activity specifically directed to the study of leadership with respect to schools and other educational organizations has declined since about 1975 (Immegart, 1988).

Within the field of public education since 1980, national, state, and local level concerns for excellence in public education have stimulated among practitioners a mild resurgence of interest in effective educational leadership. Interest in educational leadership has also been stimulated by the conclusions of school effectiveness research (Purkey & Smith, 1983). Within this body of research, an important conclusion is that school principals play an important leadership role in schools deemed effective (Purkey & Smith, 1983). In spite of a somewhat renewed interest in educational leadership, conceptualizations and understandings of the role of the principal as an educational leader are fraught with vague notions regarding what effective principals acting as educational leaders actually do and how they do it.

Over the past fifty years, four orientations to the study of leaders and leadership have emerged in a more-or-less sequential manner. These orientations include investigations oriented to studying: (1) traits of leaders and traits associated with leadership, (2) styles of leaders and styles associated with leadership, (3) behaviors of leaders and behaviors associated with leadership, and (4) situations or contingencies experienced by leaders and situations or contingencies associated with leadership (Immegart, 1988). With respect to educational leadership, studies have roughly paralleled yet lagged behind studies beyond the field of education.

In spite of the numerous studies of leaders and leadership over the last fifty years in general and in

education in particular, theoretical and methodological problems have plagued the study of leadership (Immegart, 1988). Setting aside methodological problems, there are two important and related theoretical problems associated with the study of leaders and leadership which should be noted.

The two theoretical problems are concerned with accepted conceptualizations of leadership and theory associated with conceptualizations of leadership. Immegart (1983, p. 272) notes, "There really are not commonly accepted conceptualizations [of leadership], and there is very little of what could be really called leadership theory to guide inquiry." Immegart continues (1988, p. 273), "A consequence of the present state of conceptualization of leadership is the aconceptual and atheoretical nature of all too many studies. In numerous instances, there is simply no conceptualization guiding the inquiry."

Arguing for an emphasis on theoretical development and a redirection of the study of leadership, Immegart (1988, p. 273) states, "Perhaps the real problem with respect to leadership theory and conceptualization has been the lack of theoretical development. Rigorous attempts at theory building are somewhat scarce. Many existing efforts are merely attempts to theorize or conceptualize <u>about</u> leadership as opposed to being serious work directed toward developing theories or conceptualizations <u>of</u> leadership."

Immegart (1988, p. 273) concludes his critique of the current status of conceptualization and theory development of leadership by stating, "Improved conceptualization of leadership seems critical at this time for further advancing inquiry and the understanding of leadership. ...it may well be time to move on to the investigation of <u>leading</u> rather than <u>leadership</u>." This is to say, a conceptual understanding of the categories of process associated with leadership and a theoretical understanding of the theoretical relationships among the processes would advance the study of leadership at this time.

In response to the character of the general literature concerned with leadership and that which is particularly concerned with educational leadership, a theory of leadership focusing on <u>leading</u> was formulated. To explore the theoretical formulation of leadership, an instrument was designed specifically to assess principal leadership. Following the instrument development, two studies were conducted which collectively were designed to assess the reliability, validity, and utility of the instrument.

Purposes of the Paper

The purposes of the paper are fourfold. The first purpose is to summarize briefly the conceptualization of leadership mentioned above. Guided by the theory, the second purpose is to discuss the development of an instrument designed specifically to assess principal leadership. The third purpose is to present and discusses two substantive studies which were conducted to assess the instrument. The first study focused on assessor reliability and construct validity of the instrument. The second study focused on interrater reliability of the instrument. From the two studies together, an assessment of the instrument's utility can be made. The forth and final purpose of the paper is to suggest directions which the present line of research might take.

Theoretical Perspective

In response to the recommendations of Immegart and others that leader and leadership theory should focus on the processes associated with leaders and leadership, a theory was developed which specifically included processes associated with leadership. The theory rests on the work of Douglas E. Mitchell and William G. Spady (1983). The work of these theorists, however, has been oriented to developing a theoretical understanding of the relationship between a teacher and students and not concerned with leadership specifically. However, by assuming that teachers are leaders in the most fundamental sense and that students are followers in a fundamental sense, the work of Mitchell and Spady can be transformed into a theory of leadership. The resulting theory can then be modified to provide understanding of various leadership roles in different types of organizations.

Leadership can be defined as the use of <u>authority</u> and <u>power</u> (Spady & Mitchell, 1977; Mitchell & Spady, 1983) by a leader to socially control and influence followers in a formal organization. Authority in leadership involves a leader inducing followers to voluntarily hold and personally fulfill desired role and goal expectations. Power in leadership, on the other hand, involves a leader inducing followers to voluntarily or involuntarily display certain behaviors. Leadership style can be defined as the presence and relative intensity of authority and power in leadership action.

Leadership associated with authority involves establishing and maintaining interpersonal relationships which have an authentic and substantive character. These

relationships are intrinsically fulfilling to both leader and followers. Arising out of the authentic and substantive relationships are symbols, both tangible and intangible, which are extrinsic to the relationships. The symbols, when separated from authority relationships, become power resources for leaders. Leadership associated with power arises when a leader manipulates these resources with the intent of controlling the behavior of followers.

Power resources can be viewed by followers as either rewarding or punishing. When leaders employ the former, voluntary behavior of followers results; when leaders employ the latter, involuntary yet compliant behavior of followers ensues. In order to avoid fear and anxiety associated with punishments, behavior of followers conforms to a leader's desires. It is important to underscore the notion that leadership associated with power can both voluntarily and involuntarily control the behavior of followers; whereas, only leadership associated with authority can induce followers to voluntarily hold and fulfill desired role and goal expectations.

Authority relationships between a leader and followers can be analytically separated into four independent authority modes. These include charismatic, traditional, legal, and expert. Followers experience intimacy under a leader's charismatic authority and worthiness under traditional authority. Under legal authority, followers experience security and experience adequacy under expert authority. The authority modes, the relationship among them, and their impact on followers are presented in Figure 1. at the end of this paper.

Similar to authority relationships between a leader and followers, power relationships can be analytically separated into four corresponding independent modes. These include psychological, moral, contractual, and technical. Associated with each of these modes are rewarding and punishing resources. Followers experience acceptance when a leader employs rewarding psychological resources and rejection when punishing psychological resources are used. Honor is experienced by followers when a leader uses rewarding moral resources and shame when punishing moral resources are employed. Rewarding contractual resources used by a leader produce the experience of autonomy in followers, and punishing contractual resources produce a sense of coercion. The use of rewarding technical resources by a leader results in a sense of potency on the part of followers; where as, the use of punishing technical resources produces a feeling of manipulation. The power

modes, the relationship among them, and the consequences they have for followers are presented in Figure 2.

Leadership can be viewed as having four distinct authority functions. These include management, evaluation, training, and socialization. Component combinations of authority modes form the basis of the four leadership authority functions. Components of traditional and legal modes of authority form the basis of the management function. The evaluation function is based on components of legal and expert modes of authority. Expert and charismatic authority mode components serve as the basis of the training function. And, the socialization function of leadership is based on charismatic and traditional authority mode components. Figure 3 presents the four leadership authority modes, their impact on followers, and their associate leadership authority functions.

Similar to authority, leadership also can be viewed as having four distinct power functions. Related to the reward and punishment aspects of power, the functions have both personally acceptable and personally unacceptable aspects. Hence, the four leadership power functions occur in pairs; these include admiration and social isolation, dominance and normlessness, success and powerlessness, and challenge and self estrangement.

Component combinations of power modes form the basis of the four leadership power functions. In reward oriented power, components of the psychological and moral power modes form the basis of the admiration function; in punishment oriented power, components of these same power modes form the basis of the social isolation function. Components of the moral and contractual power modes form the basis of the dominance function in reward oriented power; components of these same modes form the basis of the normlessness function in punishment oriented power. Components of the contractual and technical modes of power in reward oriented power form the basis of the success function; components of these same power modes in punishment oriented power form the basis of the powerlessness function. And, in reward oriented power, components of the technical and psychological power modes form the basis of the challenge function; punishment oriented power components of these same power modes form the basis of the self estrangement functions. Figure 4 presents the four leadership power modes, their respective reward and punishment consequences for followers, and their associated leadership power functions.

Leadership can be viewed as having four distinct authority orientations. Each of the orientations involves a

pair of polar sub-orientations. The polar pairs include formal roles and informal roles, maintenance goals and production goals, organizational stability and individual change, and rational relationships and affective relationships. In each pair, the presence of one sub-orientation does not negate the presence of the other; however, the intensity of one sub-orientation in a pair may predominate over the other.

Component combinations and/or combinations of authority modes form the basis of the two polar sub-orientations in each of the four leadership orientations. The legal authority mode along with components of the traditional and expert authority modes form the basis of the sub-orientation aimed at establishing and maintaining formal roles; on the other hand, the charismatic authority mode along with components of the traditional and expert authority modes form the basis of the sub-orientation aimed at establishing and maintaining informal roles. The sub-orientation aimed at establishing and continuing production goals is based on the expert authority mode along with components of the legal and charismatic authority modes; whereas, the sub-orientation aimed at establishing and continuing maintenance goals is based on the traditional authority mode along with components of the charismatic and legal authority modes.

The traditional and legal authority modes form the basis of the sub-orientation aimed at establishing and maintaining organizational stability; whereas, the charismatic and expert authority modes form the basis of the sub-orientation aimed at initiating and sustaining individual change. And, the legal and expert authority modes form the basis of the sub-orientation aimed at establishing and maintaining rational interpersonal relationship; on the other hand, the traditional and charismatic authority modes form the basis of the sub-orientation aimed at establishing and maintaining affective interpersonal relationships.

Figure 5 presents the four leadership authority modes, their impact on followers, the leadership authority functions associated with various mode components, and the leadership orientations associated with various authority modes and component modes.

For purposes of developing an instrument to assess leadership, the definition of leadership style was expanded from the one presented previously and defined as the relative intensity of the presence of the various modes of authority and power in leader action.

Assessment Instrument

In order to explore the utility of the theory of leadership discussed above, it was decided to operationalize the theory in terms of a leadership assessment instrument. For purposes of instrument development, it was decided to construct the instrument specifically to assess the leadership of school principals.

In order to systematically explore the usefulness of the theory and the reliability, validity, and utility of the instrument, it was decided to develop and construct the instrument in a manner which could be used to assess principal leadership employing a standardized method. The method employed was to select a group of principals and have them be participants in a leadership assessment exercise. In the study, the participants would read a case study involving a typical situation experienced by principals, respond to the case study in terms of what they would do in the situation and why they would do it, and have their responses assessed by a set of assessors in terms of the instrument.

An instrument specifically designed to assess principal leadership in terms of responses to case studies was constructed in six sections. The first section, containing 12 items, was designed to assess the presence and intensity of the four authority modes in principal leadership. The second section, containing 16 items, was constructed to assess the presence and intensity of the four power modes in principal leadership. The third section, containing four items, was designed to assess the presence and intensity of the four leadership orientations in principal leadership. The forth section, containing a single item, was designed to assess the relative intensity of authority and power in principal leadership. The fifth section, containing a single item, was constructed to assess overall principal leadership effectiveness. The sixth and final section requested demographic data from participants, both principals being assessed as well as assessors. In all, the instrument contains 34 assessment items and 14 demographic questions. The instrument was given the title, Principal Leadership Profile. A copy of the instrument is included in Appendix A of the paper.

In the section designed to assess principal leadership for the intensity of various modes of authority, 12 indicator items were constructed. Four of these were designed to assess the intensity of charismatic, traditional, legal, and expert authority modes independently (Items 1, 4, 7, and 10 respectively).

The remaining eight items in the first section were constructed to assess the intensity of the various component combinations of authority modes related to the four leadership authority functions. For each function, management (Items 6 and 8), evaluation (Items 9 and 11), training (Items 3 and 12), and socialization (Items 2 and 5), two items were developed to assess the intensity of authority modes in responses.

In the second section of the instrument, which was designed to assess principal leadership for the intensity of various modes of power, 16 indicator items were constructed. For each of the four power modes, psychological power (Items 13 and 15), moral power (Items 21 and 23), contractual power (Items 17 and 19), and technical power (Items 25 and 27), two items were developed. One item was developed to assess the intensity of the reward orientation, and another item was constructed to assess the intensity of the punishment orientation.

The eight other items in the second section were developed to assess the intensity of the various component power modes associated with the four leadership power functions. For each function, dominance/normlessness (Items 22 and 24), success/powerlessness (Items 18 and 20), challenge/self estrangement (Items 26 and 28), and admiration/social isolation (Items 4 and 6), a pair of items were developed. The first item in each pair was constructed to assess the intensity of reward oriented responses; the second item in each pair was developed to assess the intensity of punishment oriented responses.

Each of the four items in the third section of the instrument was designed to assess the intensity of the authority modes associated with each of the four leadership sub-orientations. Two items were developed to assess the intensity of authority modes of the two polar sub-orientations, rational relationships versus affective relationships (Item 30) and individual change versus organization stability (Item 29) associated with leadership orientations. And two items were developed to assess the intensity of authority modes and component authority modes of the two polar sub-orientations production goals versus maintenance goals (Item 32) and formal roles versus informal roles (Item 31) associated with each of the other leadership orientations.

The fourth section of the instrument was designed to assess principal leadership in terms of relative intensity of authority and power in principal leadership (Item 33).

The fifth section of the assessment instrument contained a single item. This item was developed to assess principal leadership in terms of overall leadership effectiveness (Item 34).

The sixth and final section of the instrument was constructed in two parallel forms. One form requests principals and the other form requests assessors to provide 14 pieces of demographic data. Details of the requested demographic data for both candidates and assessors are contained in Appendix B.

The 34 item instrument was constructed with all items in parallel form and in such a way that all items could be rated on a five-point scale. In the instrument, assessors are directed to assess responses holistically. In the first section of the instrument, for participant responses, assessors are directed to indicate the emphasis of authority modes responses as characterized in each item. Similarly, assessors in the second section are directed to indicate the emphasis of power modes as described in each item. Employing the five-point rating scale, assessors are directed to score items with a "1" if a response "does not emphasize" and a "5" if a response does "strongly emphasize" the indicated authority or power modes. Additionally, in both sections assessors are directed to indicate by item the emphasis of authority or power modes the participant "should emphasize." Hence, the instrument in the first two sections calls for a by item <u>is-ought</u> assessment of authority or power modes in participant responses.

In the third section of the instrument, assessors are directed to indicate the direction and intensity of emphasis of the authority sub-orientations in each of the four polar pairs of sub-orientations. Employing the five-point rating scale, assessors are directed to score an item with a "1" if a response emphasizes one sub-orientation, a "5" if a response emphasizes the other sub-orientation, or a "3" if a response emphasizes neither. Also in the third section, assessors are directed to indicate by item the emphasis the sub-orientation candidates <u>should</u> emphasize. Hence, the instrument in the third section also calls for an <u>is-ought</u> assessment for leadership orientations.

The fifth section of the instrument, which contains a single item, directs assessors to indicate the participant leadership style in terms of an authority-power continuum. Employing the five-point scale, a score of "1" indicates a power style, a score of "5" indicates an authority style, and a score of "3" indicates a balanced authority-power style of leadership.

The sixth section of the instrument, which contains a single item, directs assessors to indicate participant leadership ability. Employing the five-point scale, a score of "1" indicates ineffective; a score of "5" indicates very effective.

Using the data from the Principal Leadership Profiles, four profiles can be developed graphically for each participant. These include an is-authority profile, an ought-authority profile, an is-power profile, and an ought-power profile. Collectively these graphically displayed profiles can be superimposed to produce an Individual Principal Leadership Profile.

Data from the Principal Leadership Profiles can also be aggregated and displayed for principals by level of experience. Authority and power profiles developed from these data provide a basis for comparing individual profiles with those of both experienced and inexperienced principals.

Studies

In order to assess the instrument, two studies were conducted. As noted previously, the first focused on assessor reliability and construct validity. This study will be referred to as the Leadership Assessment Exercise Study. The second study, as noted previously, focused on interrater (interassessor) reliability of the instrument. This study will be referred as the Interrater Reliability Study. Collectively, the two studies provide an assessment of the utility of the instrument.

Leadership Assessment Exercise Study

Research Design

The design of the study called for two groups of participants. One group would serve as candidates in the leadership assessment exercise; the second group would serve as assessors of the candidate performance in the assessment exercise.

With respect to candidates, the design of the full study called for securing the participation of 36 individuals, 18 experienced principals and 18 novice principals who would agree to serve as candidates in the assessment exercise. For purposes of the study, experienced principals were considered to be individuals who currently held principalships and who had at least one year experience as a school principal. Novice principals were considered to be individuals who currently held teaching positions and who

were currently enrolled in graduate level course work required for a principal's credential. The design also called for the inclusion of equal numbers of experienced and novice principals at the elementary level (6 experienced and 6 novice principals), at the middle/junior high level (6 experienced and 6 novice principals), and at the high school level (6 experienced and 6 novice principals) as well as an equal number of men and women at each level. A summary of the research design is included in Figure 6.

The second group of participants would serve as assessors and would include eighteen volunteers. The design called for six central office administrators, six principals and six teachers who would serve as assessors. The assessors would be randomly divided into six teams each of which would be composed of one central office administrator, one principal, and one teacher. Each assessment team would assess six candidates who would be randomly assigned to assessment teams.

The assessment part of the study would span a period of four hours. The 36 candidates would be given a designated interview time and asked to read the case two hours before commencing the interview. Volunteer assessors would meet one hour prior to the arrival of candidates in order to review the assessment instrument and listen to a reading of the case study.

The assessment of candidates would entail two steps. First, assessors would interview candidates beginning with two questions that required open-ended responses regarding the case study. Assessors would be encouraged to ask additional questions in order to assist the candidates' explanations, if necessary. Candidates would be allowed a maximum of 20 minutes to present a response to the case study. As candidates responded, assessors would independently complete a Principal Leadership Profile for each participant's response. The assessment interviews would also be video taped.

At the conclusion of all candidate interviews, assessors would review the video tapes and conduct a second assessment of candidates. The same team of assessors would assess the same candidates and complete a second Principal Leadership Profile for each candidate. The purpose of the video analysis would be to determine the assessment-reassessment reliability of assessors using the instrument.

Following the assessment exercise, the assessors and candidates would participate in a discussion evaluating the exercise and also complete a written evaluation.

Research Procedures

Volunteers were used in all phases of the assessment exercise. Teachers and administrators from seven school districts in south-central Washington were contacted, explained the project, and requested to participate. Attempts were made to follow the research design in the selection of volunteers. Additional administrators were contacted as back up volunteers for individuals unable to participate.

In order to satisfy the research design for candidates, experienced and novice principals across three school levels were contacted. In addition, attempts were made to balance male and female candidates. Female novice volunteers from middle schools and male novices from elementary schools were particularly difficult to identify. Not all people contacted agreed to participate, hence the actual design varied somewhat from the proposed research design.

Thirty-three volunteer candidates agreed to participate. Of these 12 were from elementary schools, nine from middle schools, and 12 from high schools. Seventeen females and 16 males participated. The frequency of participation of candidates is shown in Figure 7.

Eighteen volunteer assessors participated in the study. Six teachers, seven principals, and five central office administrators were among the assessor teams. Seven females and eleven males participated. Attempts were made to distribute the three classes of assessors among six teams. Five of six teams were each composed of one teacher, a principal, and a central office administrator. Because of last minute no-shows, one team did not have a central office administrator representative.

The six teachers who participated as assessors ranged in experience from nine to 19 years with an average of 16 years experience. One elementary, one middle school and five high school principals participated and their experience ranged from five to 21 years, with an average of 13.4 years. The five central office administrators had an average of 16 years experience with a range of 11 to 24 years.

Prior to the day of the assessment exercise, packets of information were mailed to candidate volunteers. Each candidate volunteer received a sealed envelope with instructions written on the outside of the envelope. A designated interview time and instructions to read the contents of the envelope two hours before the interview were

included. The envelope contained a written case study about a typical personnel problem which a school principal might have. Volunteer candidates were requested not to discuss the contents of the envelope or ideas regarding the contents with anyone. Hence, prior to the actual assessment interview, candidates were given two hours to read and formulate any responses to the case study.

On the day of the assessment exercise, the eighteen volunteer assessors met one hour before the arrival of candidates. The same case study that was distributed to candidates was given to assessors and read aloud to them.

The assessors were randomly divided into six teams of three each. Each assessment team was assigned a separate conference room where a table and chairs were available for candidates and assessors. A video tape recorder and camera were in each room. Attempts were made to have each conference setting organized the same way.

The three assessors in each team were given specific responsibilities. One assessor was the video operator; the second was the usher and questioner; and the third was the time keeper. Accordingly, each assessor team operated independent of other teams and contacts among teams were minimal.

The assessment exercise occurred in two steps. First, candidates presented responses to assessors who each independently completed a Principal Leadership Profile. After all candidates were assessed, a second assessment of each candidate's responses occurred by analyzing the video tapes of respective candidates. The purpose of the second assessment was to develop data for estimating assessor reliability using the instrument.

Following the assessment exercise, volunteer candidates and assessors completed evaluation forms and participated in discussions about the process. Detailed notes from these discussions as well as the evaluation forms became part of the data for this study.

Analysis of Data

The data collected in the assessment exercise were analyzed for assessor reliability and instrument validity. The reliability analysis focused on assessment-reassessment assessor reliability using the instrument. And the validity analysis focused on estimates of construct validity for the instrument. In both analyses, only the first 32 items on the instrument were included. Item 33, assessing the

relative intensity of authority and power in leadership, was reported by assessors to be sufficiently vague that it was decided not to include the item in the analyses. Since Item 34 was concerned with overall leadership effectiveness and not the processes or modes associated with leadership, it was decided not to include this item in the analyses.

Assessor Reliability

As discussed in previous sections, all candidate responses were video taped. Each candidate response was assessed immediately following the response and again after teams of assessors viewed each candidate response a second time. Analysis of the data obtained in the two assessments of each candidate provides data for an estimate of an assessment-reassessment reliability for each assessor for each candidate. The data also provide for a reliable estimate of each assessor across all candidates assessed by the assessor as well as an estimate of the assessment-reassessment reliability across all assessors.

For purposes of estimating the assessment-reassessment reliability of assessors, Pearson product-moment correlation coefficients were computed for the assessment-reassessment data for the is-profile and the ought-profile data for each candidate. The correlation coefficients for the is- and ought-profile data were combined to give one correlation coefficient for each candidate assessment by each assessor. The correlation coefficients for each assessor over all candidates assessed by the assessor were combined to give a single correlation coefficient for each assessor. Also, the coefficient for all 18 assessors were combined to produce a single Pearson product-moment correlation across all assessors and candidates. Figure 8 presents a summary of the various correlation coefficients used to estimate the assessment-reassessment reliability of the Principal Leadership Profile.

Assessment-reassessment correlation coefficients for individual assessors tend to be lower for the is-profile data than for the ought-profile data. For the is-profile data, the coefficients range from a low of .42 to a high of .88. For the ought-profile data, the coefficients range from a low of .63 to a high of .93. The combined correlation coefficient for all assessors for the is-profile data is .72; whereas, the combined coefficient for all assessors for the ought-profile data is .80.

Assessment-reassessment correlation coefficients for individual assessors for both the is- and ought-data range from a low of .63 to a high of .86. Assessment-reassessment

correlation coefficients for the is- and ought-data combined for teams of assessors are relatively close and range from a low of .71 to a high of .80. Across all assessors and candidates for both the is- and ought-data, the assessment-reassessment correlation coefficient is .77. The .77 assessment-reassessment reliability coefficient for all assessors is respectable. However a comment is warranted.

The assessment and reassessment data were collected three hours apart. This time interval was relatively short and may cause the coefficient to be inflated. However between each assessment and reassessment, at least four other candidate assessments were conducted by each assessor. It is reasonable to expect that considerable interference between each candidate assessment and reassessment was produced for assessors by the assessments which took place between each assessment and reassessment. Hence the .77 assessment-reassessment reliability coefficient for assessors may not be as inflated as it would seemingly appear. Notwithstanding the possible beneficial interference influence, it is reasonable to conclude that the .77 assessor reliability estimate is the upper limit of assessor reliability.

Construct Validity

Since the assessment-reassessment assessor reliability of the instrument is relatively high, albeit over a relatively short period of time, an estimate of instrument validity is warranted. Because the instrument is in a developmental stage, it is appropriate to consider the instrument's construct validity.

There are a variety of ways to consider and estimate construct validity (Cronbach, 1970). Among these are included comparisons of group differences and examination of internal correlations. In the following discussion, the Principal Leadership Profile will be considered in terms of both of these ways of estimating its construct validity.

For purposes of examining and estimating the construct validity of the Principal Leadership Profile, the profile data for the non-video assessments were aggregated by four factors and several levels of each factor. One factor was type of candidate. This factor has two levels, experienced principals and novice principals. Another factor was type of assessor. Included in this factor are three levels of assessors, teachers, principals, and central office staff. The third factor was type of data. This factor has two levels which include is-profile data and ought-profile data. The forth and final factor was types of items which has

three levels. The levels are authority emphasis, power emphasis, and authority orientation emphasis. The four factors and their associated levels are displayed in Figure 9. Within the intersection of each level, the average of each instrument item assessed was computed. Since in this analysis there are 32 items included in the instrument which are relevant to candidate profile data, each four-way intersection of the factor levels produces 32 data points.

In order to plot and display the profile data, Figures 4 and 5 were employed, yet modified. As noted in the section concerned with the development of the instrument, each item developed corresponds to a mode or modes of authority or power. Hence, each item can be assigned a directional component with respect to Figures 4 or 5.

In Figures 4 and 5 a set of concentric circles were constructed about the axes of each figure. The intersection of the axes were scaled "1," and appropriate circles scaled "2" were constructed about the axes. Multiplying the radii of each at these circles by two identified the radii of the circles to be scaled "3." Multiplying the radii of the circles scaled "2" again by three identified the radii of the circles to be scaled "4." Repeating the process once again by four, identified the radii of the circles to be scaled "5." In this way the areas in Figures 4 and 5 covered by each of the authority or power modes could be scaled "1" through "5."

For purposes of scaling the authority orientation scores, the intersection of the axes in Figure 5 was scaled "3." The intersections of the second and first, and first and second consecutive circles about the axes with the horizontal, vertical, and diagonal axes were each scaled "1," "2," "4," and "5" in a direction consistent with the instrument items.

Each profile item on the instrument can be assigned both a magnitude and a direction for an individual assessment of a candidate by one assessor or various combinations of candidates and various combinations of assessors. Hence profile data can be transformed into leadership profiles. For purposes of examining and estimating construct validity, Principal Leadership Profiles were constructed for the profile data in each cell in Figure 9. For comparative purposes data from different cells were plotted on the same profile axes. For example, is-authority data for both experienced and novice principals as assessed by teachers were plotted on one set of axes. The corresponding is-power data were plotted on another set of axes.

In this report only six profiles are included for purposes of example and discussion. These are the leadership profiles across all assessors for experienced principals and for novice principals. Figure 11 shows the is-authority profile for experienced principals; Figure 12 shows this same profile for novice principals. Figures 13 and 14 display the is-power profiles for the same two groups. Figure 15 shows the ought-authority profile for experienced and novice principals combined. And, Figure 16 shows the ought-power profile for the same group.

In considering and estimating the construct validity of the Principal Leadership Profile by way of group comparisons, two specific comparisons were made. These included comparing the leadership profiles of experienced principals with novice principals and comparing the profiles of both groups with profiles implied in previous research.

In comparing the is-authority and is-power profiles for experienced principals and novice principals as assessed by teachers, principals, or central office staff members, the profiles have remarkably the same shape. In general, the shapes indicate that authority based leadership for both groups of principals contains relatively high levels of charismatic and traditional authority. In contrast, the use of legal authority is substantially less. Whereas charismatic and traditional authority, and to a lesser extent legal authority, form the major components of authority based leadership, expert authority is not employed to the extent of the other three.

Although the is-authority profiles of both experienced and novice principals have the same general shape, those of novice principals tend to circumscribe less area. This is to say that in most cases the is-authority profiles of novice principals tend to be inside those of experienced principals.

In comparing the is-power profile of experienced principals with those of novice principals, the same conclusion is reached as when comparing is-authority profiles. This is to say that the is-power profiles of experienced and novice principals have remarkable the same shape and that the is-power profiles of novice principals tend to cover less area and lie inside those of experienced principals.

The finding that both experienced and novice principals have is-authority and is-power profiles of the same general shape, and that in both cases the is-profiles of novice principals tend to lie inside those of experienced

principals, suggests that the instrument has a degree of construct validity. It would be expected that individuals who have taken graduate course work to fulfill the requirements of a principal credential and who intend to become principals would tend to have leadership styles which approximate those of experienced principals but which are less developed.

In depth literature concerned with the principalship suggests that principals lead primarily by means of their own personal presence and through developing informal affective relationships with their subordinates (Wolcott, 1973; Gronn, 1983). Formal leadership through rule development and evaluation procedures tends to take second place in comparison to leadership which rests on personal presence and affective interpersonal relationships. Also, leadership based on expertise which manifests itself through teaching and demonstrating instructional practices tends not to be a strong element in principal leadership (Wolcott, 1973; Gronn, 1983).

As noted above, the leadership profiles of both experienced and novice principals indicate that they tend to favor leadership based primarily on charismatic and traditional authority. These are the very authority modes which form the basis of leadership which rests on personal presence and strongly developed affective interpersonal relationship. The lower priority both groups of principals give to leadership based on legal authority which manifests itself in rules and impersonal relationship is evident in the profiles and consistent with the in depth research on principals. The relatively little emphasis both groups of principals give to leadership based on expert authority is consistent with the research finding that principal leadership, in general, stops at the classroom door (Goodlad & Klein, 1970).

The is-leadership profiles for both groups of principals, experienced and novice, is consistent with the leadership of principals characterized in literature either explicitly or implicitly. Hence, this consistency suggests that the Principal Leadership Profile at least has some degree of construct validity.

A second useful way of considering and estimating the construct validity of the instrument is to examine the correlation of selected items on the instrument. In the Principal Leadership Profile there are two independent sets of indicator items which assess responses in terms of authority. The first set assesses the intensity of each mode independently and also assesses the emphasis of

component modes which serve as the basis for the four leadership authority functions. The second set of indicator items assesses the emphasis of the modes of authority which form the basis of the four leadership authority orientations.

Recall that each of the four leadership authority orientations consists of a pair of polar sub-orientations. Each of the pair of polar sub-orientations are divided by either a horizontal, vertical, or diagonal axis as indicated in Figure 5. In symmetrical authority profiles, it is expected that the four axes which divide the four polar pairs of sub-orientation will all intersect and will all pass through the central individual axes of the Leadership Profile.

If the set of indicator items which assess the four leadership authority orientations has validity, then the axes which divide the authority modes or component modes should all intersect at or close to the same point. This tends to be the case for all leadership profiles constructed in this study. The example Leadership Profiles shown in Figures 11, 12 and 15 demonstrate the intersection of the axes which separate the four polar sub-orientations that form the four leadership authority orientations.

If the set of indicator items which assess the four leadership authority orientations are correlated with each other and are correlated with the set of indicator items used to assess the emphasis of the authority modes separately and in combinations, then the Principal Leadership Profile instrument can be said to have a relatively high level of construct validity. As noted above, for a given leadership profile developed in this study from data employing the Principal Leadership Profile, the axes which divide the four polar leadership sub-orientations tend to intersect. Additionally these axes tend to intersect at the geometric center of the area circumscribed by the authority leadership profile. The intersection of the axes, along with the centrality of the intersection with respect to the geometric center of the leadership profile, indicates that both sets of indicator items are correlated. These correlations give further evidence that the Principal Leadership Profile has a relatively high level of construct validity.

Interrater Reliability Study

Research Design

The design of the study called for a group of assessors who would collectively and simultaneously assess the video taped responses of four candidates who participated in the Leadership Assessment Exercise Study. The video taped responses would be selected to include both a male and female experienced principal and both a male and female inexperienced principal. There would be 30 experienced professional educators who would serve as assessors. The assessment group would include 10 teachers, 10 principals, and 10 central office administrators.

Following the design used in the reassessment part of the Leadership Assessment Exercise Study, the assessors would watch each video taped response and then immediately assess the response employing the Principal Leadership Profile. Assessors would also respond to the 14-question demographic information sheet for assessors.

Research Procedures

Individuals who were enrolled in summer school courses in the College of Education at Washington State University were invited to serve as assessors in the study. Invitations were extended to students enrolled in teacher education courses as well as administrative course. A total of 28 individuals agreed to participate in the study. The participants included 13 preservice teachers, 1 experienced teacher, 1 school counselor, 1 vice principal, 4 principals, 5 central office directors, 1 assistant superintendent, and 2 superintendents. For purposes of data analysis, the preservice teachers were classified as teachers; the counselor and vice principal were classified as principals, and the directors, the assistant superintendent, and the superintendents were classified as central office administrators. Among the participants were 18 males and 10 females. The median age range for the group of assessors was 35-39 years.

A small auditorium was used as the site for the study. The auditorium had 6 permanently installed large screen video monitors which collectively gave every seat in the auditorium a relatively close and direct view of one of the six monitors.

The study lasted about 2 hours. After the participants arrived at a designated time, they were given a brief overview of the study and of what would be expected of them.

Following the overview, participants were requested to each complete the 14-question demographic form for assessors. The case study used in the Leadership Assessment Exercise Study was then read orally to the participants, while they read along on individual copies. In order to familiarize the participants with the Principal Leadership Profile, they were asked to respond to a form of the Profile specifically designed for personal leadership assessment.

Following the overview, demographic form completion, reading of the case study, and instrument familiarization, each of the selected video taped responses was shown to the group of participants. The video taped responses lasted about 10 minutes each. Immediately after each video taped response concluded, each participant was requested to complete an assessment of the response using the Principal Leadership Profile. After the last assessment had been completed, the complete Profiles were collected, and the participants were invited to attend an informal reception.

Analysis of Data

In order to analyze the assessor data for estimating the interrater reliability of the Principal Leadership Profile, only the is-profile data were used. Using these data for each candidate response individually, the frequency of assessor agreement by instrument item was explored. Specifically, the frequencies of the scores in the five-point assessment scale for each candidate for each item were computed.

An examination of the frequencies of scores by candidate by item revealed trends yet not substantial agreement among assessors. In order to amplify the trends, the five-point scale was collapsed to a three-point scale with the values 1.5, 3.0 and 4.5. Figure 10 displays the percentage of interrater agreement by instrument item by candidate in terms of the three-point rating scale.

In terms of the three-point rating scale, no agreement among assessors would be indicated by a 33.3% level of agreement across the three scores, and complete agreement would be indicated by a 100.0% level of agreement of one score and 0.0% levels in the other two. For the data collected in the study, there are five instances where the level of agreement cluster around 33.3% for each score in a single item (Item 5, Candidate 2; Item 9, Candidate 3; Item 16, Candidate 1; Item 20, Candidate 3; and Item 21, Candidate 2). And, there are two instances where the level of agreement approaches 100.0% for one score and 0.0% for the other two scores (Item 15, Candidate 2; and Item 24,

Candidate 2). It is between the levels of no agreement among assessors and complete agreement that most of the levels of agreement fall.

For purposes of this analysis, it will be assumed that a level above 50.0% among assessors for an item score for a candidate at least indicates a trend toward assessor agreement. Based on this assumption, the interrater agreement greater than the 50.0% level is 67.6% across all items for all candidates. The lowest level of interrater agreement occurs in the item concerned with overall leadership effectiveness. For this item, only 25.0% of the candidate assessment items were above the 50.0% agreement level among assessors. The highest level of interrater agreement occurs in the set of items concerned with the use of punishment centered power. In these items, 81.3% of the candidate assessments items were above a 50.0% agreement level among assessors. The percentages of the candidate assessment items above a 50.0% agreement level in the various categories of candidate assessment are shown on Figure 10.

Since there are only very few instances among the raters where there is not at least a trend toward agreement among assessors, and for 67.6% of the candidate assessment items, there is over 50.0% agreement among the assessors regarding the assessment score, it seems reasonable to conclude that there is a moderate level of interrater reliability associated with the Principal Leadership Profile.

Instrument Utility

The results of both the Leadership Assessment Exercise Study and the Interrater Reliability Study lead to the conclusion that the Principal Leadership Profile with further development and testing holds promise for reliably and validly assessing the leadership of school principals. Assuming that further development of the instrument will resolve both reliability and validity issues, it is important to briefly explore the utility of the instrument.

One of the obvious uses of the Principal Leadership Profile would be to develop individual profiles for novice as well as experienced principals and then interpret the profiles in terms of the leadership theory presented in this paper. A complete profile would contain an is-authority profile, an is-power profile, an ought-authority profile, and an ought-power profile. An example of an is-authority profile and an is-power profile for a male novice principal are shown in Figures 17 and 18. Similar profiles are

displayed in Figures 19 and 20 for a female novice principal. These individual is-leadership profiles can be compared with the is-profile for all experienced principals across all assessors (Figures 11 and 12) and with similar profiles developed for novice principals (Figures 13 and 14). The individual profiles can also be compared with the ought-profiles developed across all principals, experienced and novice, assessed by all assessors (Figures 15 and 16).

For purposes of discussing the utility of the Principal Leadership Profile in assessing individuals in terms of leadership style, the discussion will be limited to examining the is-leadership profile of the female novice principal shown in Figures 19 and 20.

In examining individual leadership profiles for purposes of inferring leadership style, a number of comparisons can be made. Some of these can be made by making comparison within an individual leadership profile, while others can be made by making comparisons among different profiles. In examining the is-profiles of the female novice principal, only several illustrative comparisons will be made.

Comparing the is-profiles of the novice principal indicates that she controls others using both authority and power, however with more emphasis on authority. When using power she utilizes reward oriented power to a larger extent than punishment oriented power.

Making comparisons within the is-authority profile indicates that the novice principal emphasizes control through socialization and de-emphasizes control through evaluation, management, and training. Additionally the profile indicates the principal emphasizes individual change slightly over organizational stability. Clearly her leadership is oriented toward organizational maintenance rather than productivity.

Making similar and other comparisons of individual leadership profiles for candidates who have been assessed by the Principal Leadership Profile in assessment exercises seems to provide a useful way to characterize the leadership style of most candidates.

Implications for Further Research

The results of the studies on the Principal Leadership Profile reported in this paper have implication for further research oriented to the development and refinement of the instrument. Future research should continue in several

repetitive phases. In the next phase, all items in the Profile should be reexamined in light of the leadership theory and their applicability to the role of principal. Assessors report being particularly uncomfortable with the items designed to assess the presence and intensity of punishment oriented power, the items designed to assess authority-based leadership orientations, and the item concerned with the relative presence of authority and power in leadership style. Also in the next phase, additional and more tightly designed intrarater and interrater reliability studies should be conducted. Also, attempts should be made to validate the instrument empirically. In general, item analyses, rater reliability studies, and validity studies should all be repeated in each subsequent instrument development and refinement phase.

In addition to studies conducted for the purpose of instrument development and refinement, several other studies should be conducted. These studies should address the questions of the effect of knowledge of the leadership theory on assessors and assessment and the effect of assessor training in various forms.

Beyond the studies mentioned above, the instrument could be modified for individual assessment as well as for leadership assessment of other roles, superintendent and teacher for example.

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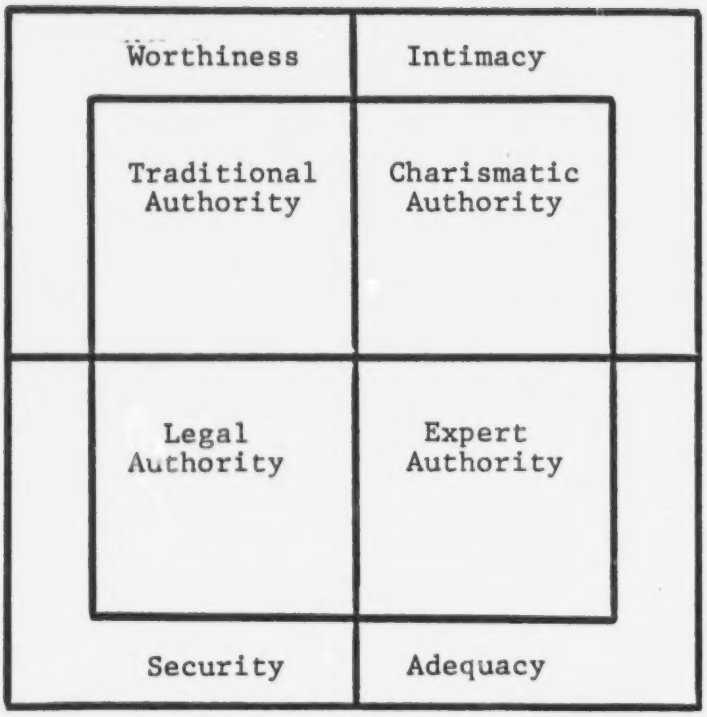

Figure 1*

Four Leadership Authority Modes, the Relationship Among the Modes, and the Impact of the Modes on Followers

*Adapted from a figure in Spady & Mitchell, 1977.

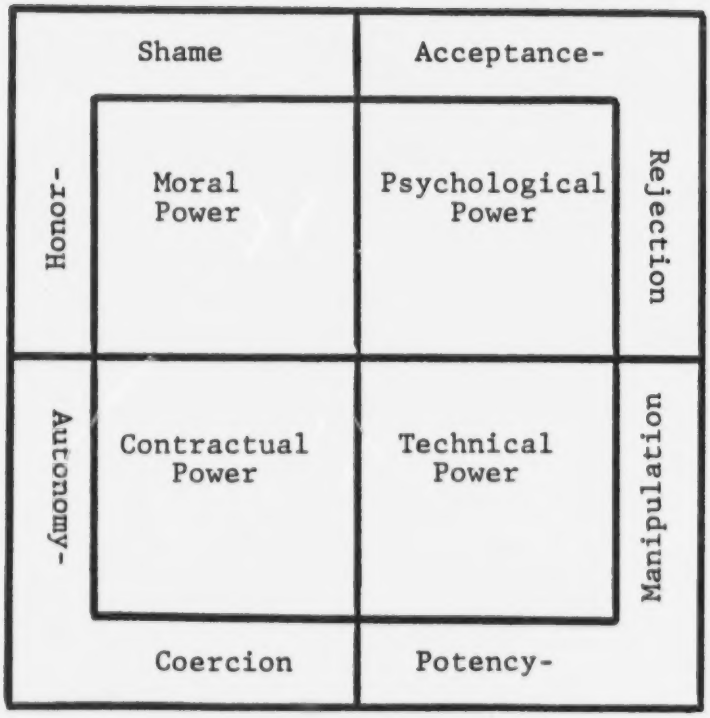

Figure 2*

Four Leadership Power Modes, the Relationship Among the Modes, and the Consequences of the Modes on Followers

*Adapted from a figure in Spady & Mitchell, 1977.

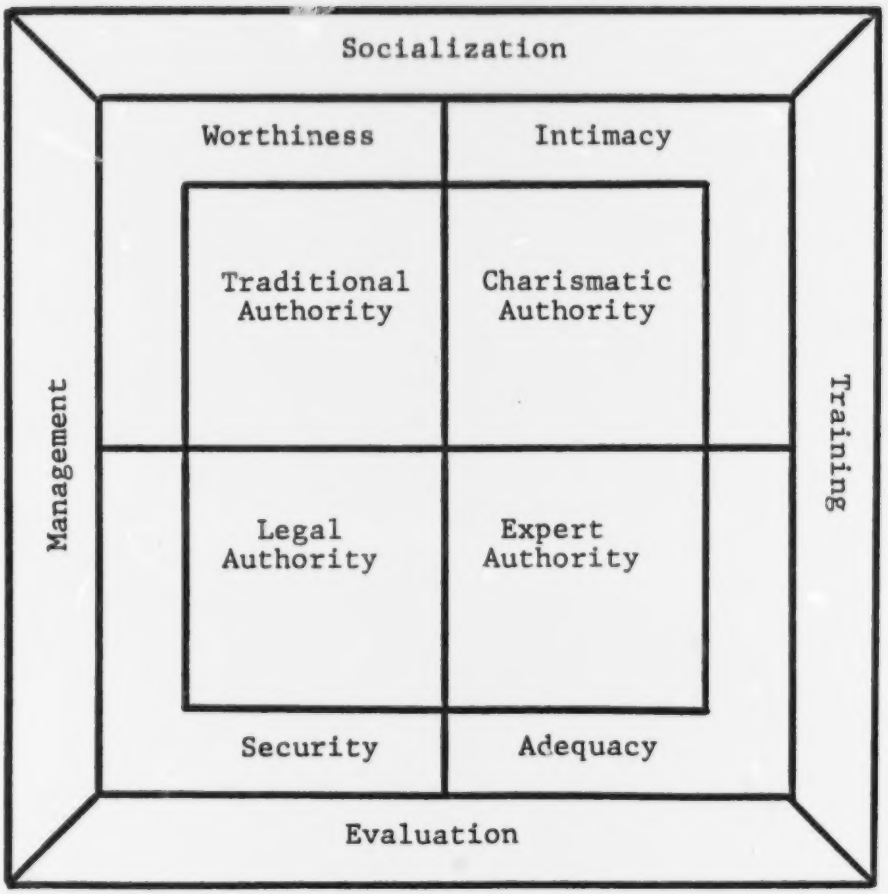

Figure 3*

Four Leadership Authority Modes, the Impact of the Modes on Followers, and the Leadership Authority Functions Associated with the Modes

*Adapted from a figure in Spady & Mitchell, 1977.

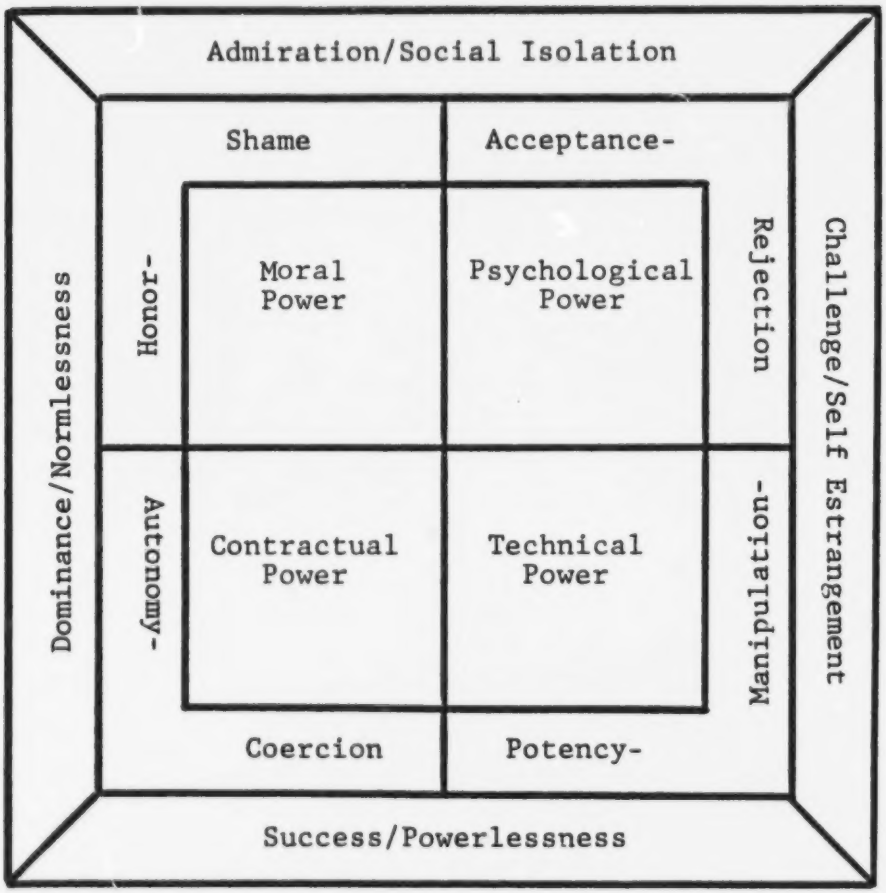

Figure 4*

Four Leadership Power Modes, the Consequences of the Modes on Followers, and the Leadership Power Functions Associated with the Modes

*Adapted from a figure in Spady & Mitchell, 1977.

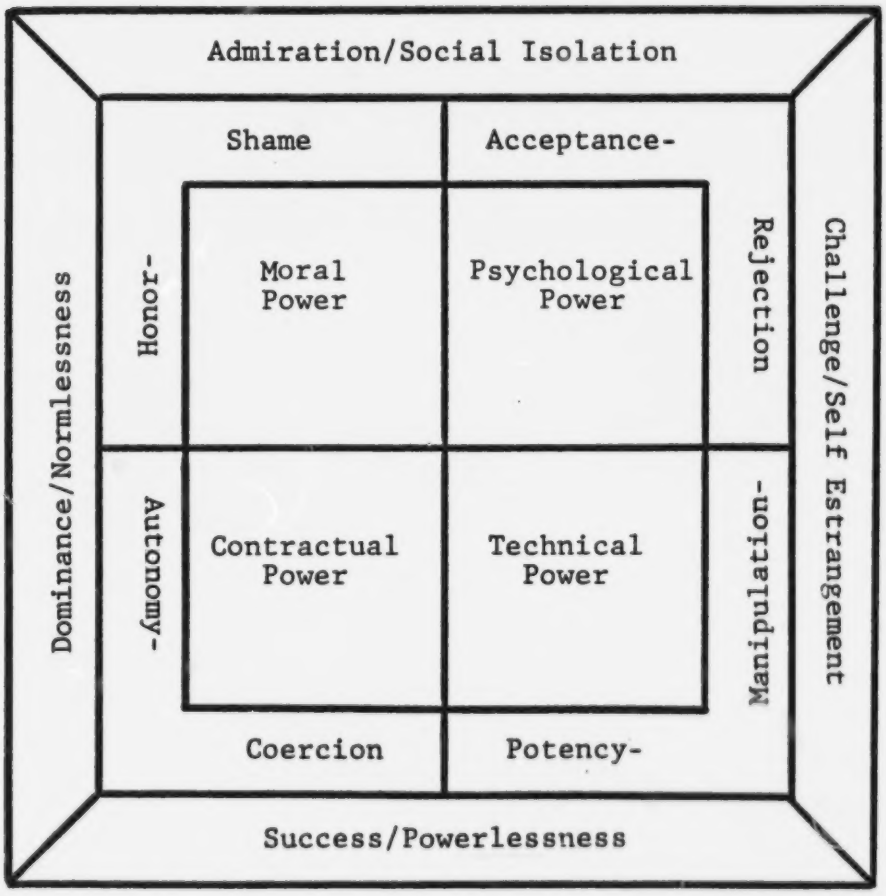

Figure 4*

Four Leadership Power Modes, the Consequences of the Modes on Followers, and the Leadership Power Functions Associated with the Modes

*Adapted from a figure in Spady & Mitchell, 1977.

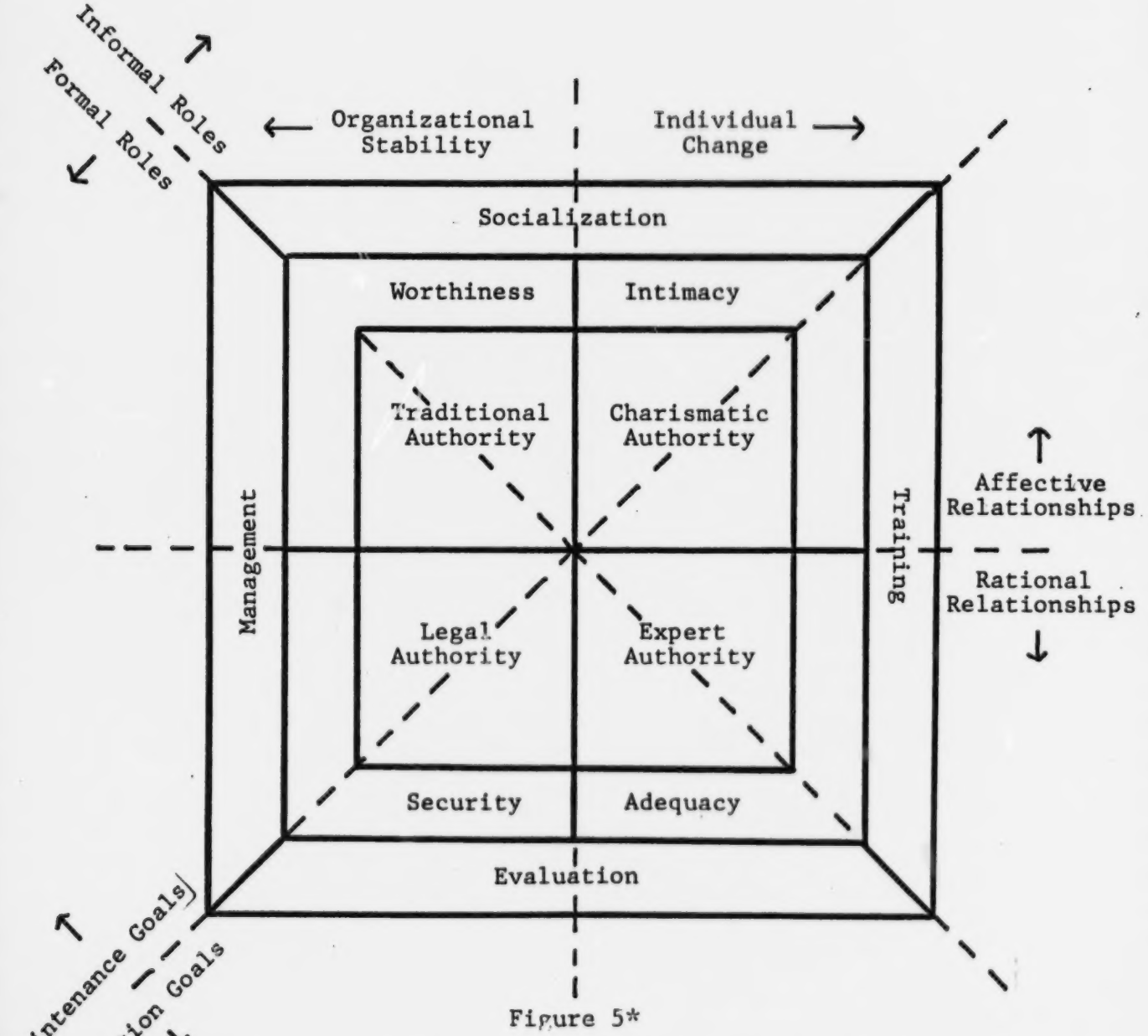

Figure 5*

Four Leadership Authority Modes, the Impact of the Modes on Followers, the Leadership Authority Functions Associated with the Modes, and the Leadership Orientations Associated with the Modes.

*Adapted from a figure in Spady & Mitchell, 1977.

Figure 6

Research Design of Candidates Participating in Principal Leadership Profile Grouped by Categories.

School Level	Novice Principals		Experienced Principals		Totals
	Male	Female	Male	Female	
Elementary	3	3	3	3	12
Middle/ Junior High	3	3	3	3	12
High	3	3	3	3	12
Totals					
Gender	9	9	9	9	
Experience	18		18		36

Figure 7

Frequency of Candidates Participating in Principal Leadership Profile Grouped by Categories.

School Level	Novice Principals		Experienced Principals		Totals
	Male	Female	Male	Female	
Elementary	1	3	4	4	12
Middle School	3	1	3	2	9
High School	2	3	3	4	12
Totals					
Gender	6	7	10	10	
Experience	13		20		33

Figure 8

Assessment-Reassessment Reliability Coefficients for Individual Assessors, Teams of Assessors, and All Assessors for Is-Profile Data, Ought-Profile Data, and Is- and Ought-Profile Data Combined.

Team Number	Assessor Number	Reliability Coefficients, r		
		Is-Profile Data	Ought-Profile Data	Is- and Ought-Profile Data
1	1	.61	.70	.66
	2	.83	.89	.86
	3	.75	.83	.80
	Team	.73	.81	.77
2	1	.75	.84	.80
	2	.88	.68	.78
	3	.76	.72	.75
	Team	.80	.75	.78
3	1	.71	.81	.77
	2	.62	.63	.62
	3	.73	.74	.73
	Team	.69	.73	.71
4	1	.42	.84	.63
	2	.78	.93	.86
	3	.64	.91	.78
	Team	.61	.89	.76
5	1	.72	.78	.75
	2	.76	.81	.79
	3	.75	.79	.77
	Team	.74	.79	.77
6	1	.67	.81	.74
	2	.81	.87	.84
	3	.76	.88	.82
	Team	.75	.85	.80
All Assessors		.72	.80	.77

Figure 9

Aggregation of Profile Data by Factors and Levels.

TYPES OF ASSESSORS	TYPES OF CANDIDATES		
	Experienced Principals		Novice Principals
	TYPES OF DATA		
	Is Data	Ought Data	
	TYPES OF ITEMS	TYPES OF ITEMS	
Teachers	(1) Authority Emphasis (2) Power Emphasis (3) Authority Orientation Emphasis	(1) Authority Emphasis (2) Power Emphasis (3) Authority Orientation Emphasis	*
Principals	*	*	*
Central Office Staff	*	*	*
All Assessors	*	*	*

*Details of these cells are identical to the "Teachers-Experienced Principals" cell.

Figure 10

Percentage of Interrater Agreement by Instrument Items by Candidates.

Item Type & Number		Assessment	Candidate Number 1	2	3	4
Authority	1	1.5	60.7*	46.4	64.3*	28.6
		3.0	21.4	25.0	21.4	39.3
		4.5	17.8	28.5	14.3	22.1
	2	1.5	32.1	17.9	21.4	0.0
		3.0	17.9	25.0	14.3	10.7
		4.5	50.0	57.2*	64.3*	89.3*
	3	1.5	53.6*	32.1	28.6	3.6
		3.0	25.0	21.4	14.3	10.7
		4.5	21.4	46.5	57.1*	85.8*
	4	1.5	32.1	14.3	17.9	3.6
		3.0	42.9	25.0	28.6	28.6
		4.5	25.0	60.7*	53.6*	67.9*
	5	1.5	39.3	32.1	17.9	3.6
		3.0	35.7	32.1	25.0	14.3
		4.5	25.0	35.7	57.1*	71.9*
	6	1 5	71.4*	57.7*	44.4	40.7
		3.0	14.3	23.1	22.2	29.6
		4.5	14.3	19.2	31.1	29.6
	7	1.5	3.6	10.7	10.7	10.7
		3.0	35.7	32.1	32.1	17.9
		4.5	60.7*	57.1*	57.1*	71.4*
	8	1.5	39.3	53.6*	21.4	25.0
		3.0	17.9	32.1	14.3	17.9
		4.5	42.8	14.2	64.3*	56.9*
	9	1.5	60.7*	51.9*	39.3	32.1
		3.0	14.3	33.3	32.1	10.7
		4.5	25.0	14.8	28.6	57.1*
	10	1.5	78.6*	46.4	46.4	42.9
		3.0	14.3	28.6	21.4	21.4
		4.5	7.1	25.0	32.2	35.7
	11	1.5	70.4*	70.4*	22.2	35.7
		3.0	18.5	18.5	11.1	35.7
		4.5	11.1	11.1	56.6*	28.6
	12	1.5	84.6*	61.5*	69.2*	61.5*
		3.0	11.5	23.1	19.2	21.1
		4.5	3.8	14.8	11.5	15.4

Percent Interrater Agreement >50.0% for All Authority Items: (33/48(100)) = 68.8%

* Indicates interrater agreement >50%.

Figure 10 (Continued)

Item Type & Number		Assessment	Candidate Number 1	2	3	4
Power: Reward or Punish-ment	13	1.5	53.6*	21.4	46.4	28.6
		3.0	28.6	25.0	35.7	46.4
	R	4.5	17.9	53.6*	17.8	25.0
	14	1.5	83.9*	48.1	57.1	42.9
		3.0	7.1	22.2	25.0	46.4
	R	4.5	3.6	29.6	17.9	10.9
	15	1.5	46.4	96.4*	71.4*	75.0*
		3.0	25.0	0.0	10.7	14.3
	P	4.5	38.6	3.6	17.9	10.7
	16	1.5	35.7	78.6*	60.7*	75.0*
		3.0	28.6	14.3	21.4	17.9
	P	4.5	35.8	7.2	17.8	7.1
	17	1.5	67.9*	51.9*	53.6*	53.6*
		3.0	21.4	18.5	35.7	32.1
	R	4.5	10.7	29.6	10.7	14.3
	18	1.5	57.1*	57.1*	57.1*	57.1*
		3.0	32.1	25.0	25.0	32.1
	R	4.5	10.7	17.8	17.9	10.7
	19	1.5	28.6	71.4*	46.4	71.4*
		3.0	14.3	21.4	28.6	21.4
	P	4.5	57.1*	7.1	25.0	7.1
	20	1.5	53.6*	89.3*	39.3	71.4*
		3.0	21.4	10.7	28.6	14.3
	P	4.5	25.0	0.0	32.1	14.3
	21	1.5	57.1*	35.7	46.4	42.9
		3.0	28.6	35.7	28.6	35.7
	R	4.5	14.3	28.6	25.0	21.4
	22	1.5	50.0	57.1*	67.9*	67.9*
		3.0	25.0	28.6	25.0	25.0
	R	4.5	25.0	14.2	7.2	7.2
	23	1.5	57.1*	82.1*	64.3*	85.7*
		3.0	7.1	10.7	17.9	10.7
	P	4.5	35.7	7.1	17.9	3.6
	24	1.5	39.3	92.9*	67.9*	89.3*
		3.0	17.9	7.1	17.9	7.1
	P	4.5	42.8	0.0	14.2	3.6
	25	1.5	57.1*	39.3	67.9*	42.9
		3.0	21.4	42.9	28.6	50.0
	R	4.5	21.5	17.9	3.6	7.1
	26	1.5	85.2*	10.7	57.1*	17.9
		3.0	14.0	17.9	28.6	35.7
	R	4.5	0.0	71.4*	14.3	46.5
	27	1.5	42.9	82.1*	57.1*	75.0*
		3.0	14.3	0.0	10.7	21.4
	P	4.5	42.9	17.8	32.2	3.6
	28	1.5	64.3*	78.6*	64.3*	85.7*
		3.0	21.4	17.9	25.0	10.7
	P	4.5	14.3	3.6	10.7	3.6

Percent Interrater Agreement >50% for All Power Items:
(47/64)(100) = 73.4%

Percent Interrater Agreement >50% for Reward Power Items:
(21/32)(100) = 65.6%

Percent Interrater Agreement>50% for Punishment Power Items:
(26/32)(100) = 81.3%

* Indicates interrater agreement >50%.

Figure 10 (Continued)

Item Type & Number		Assessment	Candidate Number 1	2	3	4
Authority Functions	29	1.5	39.3	14.3	53.6*	25.0
		3.0	7.1	35.7	17.9	14.3
		4.5	55.6*	50.0	28.5	60.7*
	30	1.5	60.7*	25.0	53.6*	46.4
		3.0	21.4	39.3	28.6	25.0
		4.5	17.8	35.7	17.9	28.6
	31	1.5	21.4	39.3	25.0	21.4
		3.0	25.0	25.0	25.0	32.1
		4.5	53.6*	35.7	50.0	56.4*
	32	1.5	28.6	35.7	25.0	10.7
		3.0	25.0	14.3	10.7	17.9
		4.5	46.4	50.0	63.3*	71.5*
Percent Interrater Agreement >509% for Authority Function Items: (9/16)(100) = 56.3%						
Authority-Power Balance	33	1.5	32.1	7.1	35.7	10.7
		3.0	42.9	32.1	39.3	28.6
		4.5	25.0	60.7*	25.0	60.7*
Percent Interrater Agreement >50% for Authority-Power Balance Item: (2/4)(100) = 50.0%						
Leader Effectiveness	34	1.5	39.3	21.4	28.6	7.1
		3.0	42.9	28.6	28.6	25.0
		4.5	17.9	50.0	42.8	67.8*
Percent Interrater Agreement >50% for Leadership Effectiveness Item: (1/4)(100) = 25.0%						
Percent Interrater Agreement >50% for All Items: (92/136)(100) = 67.6%						

* Indicates interrater agreement >50%.

PRINCIPAL LEADERSHIP AUTHORITY PROFILE

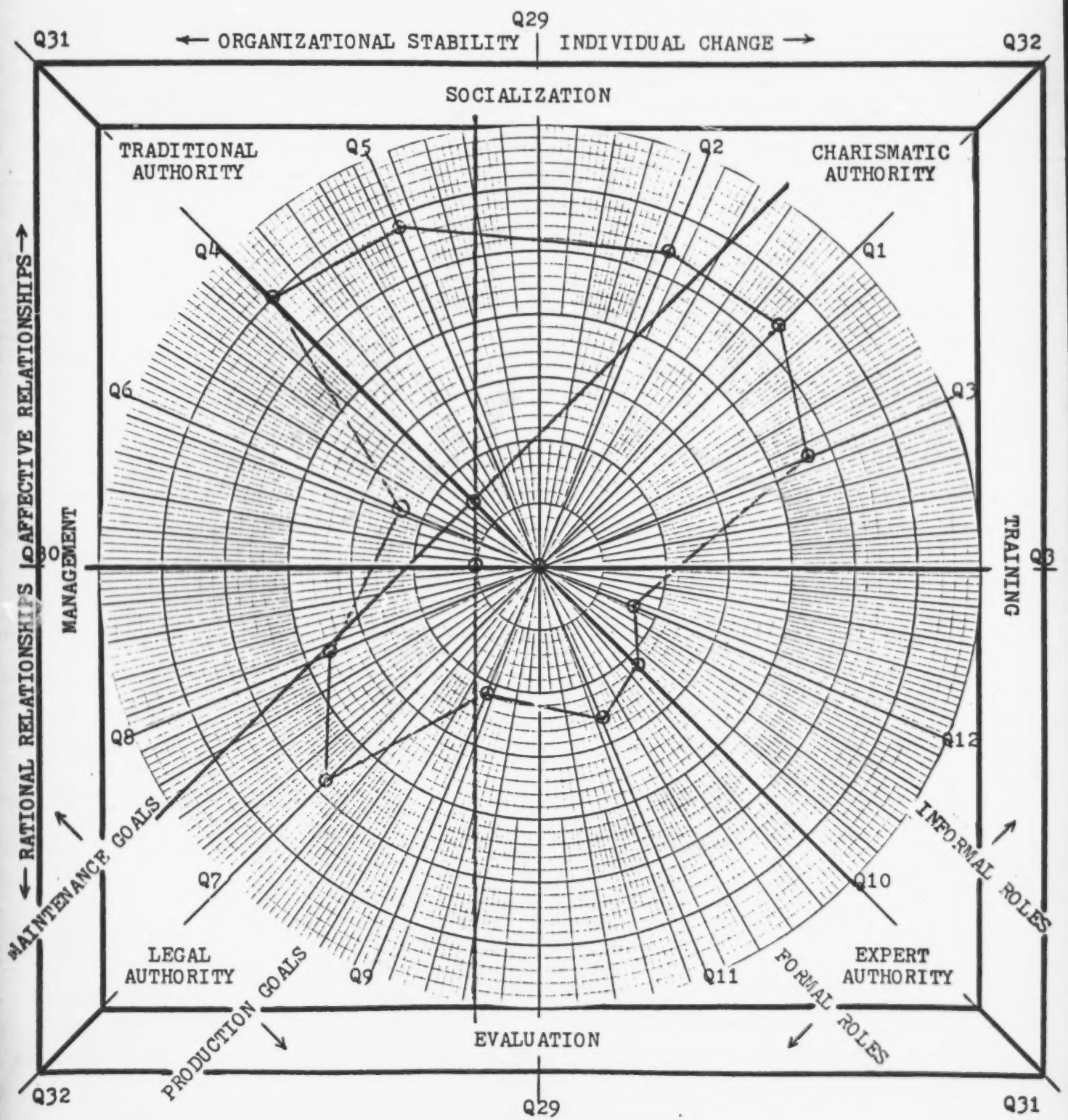

Figure 11

Is-Authority Profile of All Experienced Principals Assessed by All Assessors

PRINCIPAL LEADERSHIP POWER PROFILE

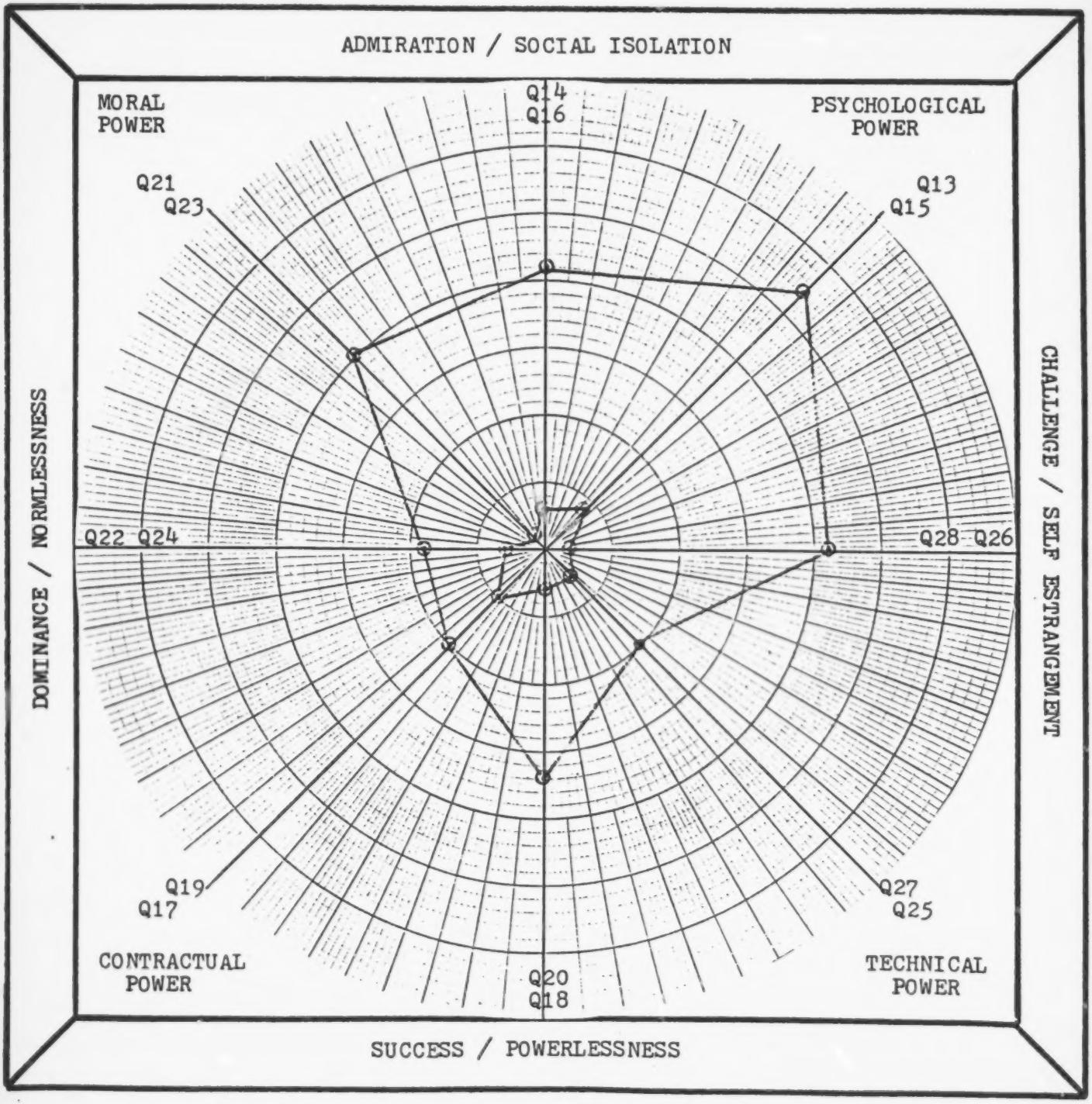

Figure 12

Is-Power Profile of All Experienced Principals Assessed by All Assessors
The Outer Profile Represents Reward Oriented Power.
The Inner Profile Represents Punishment Oriented Power.

PRINCIPAL LEADERSHIP AUTHORITY PROFILE

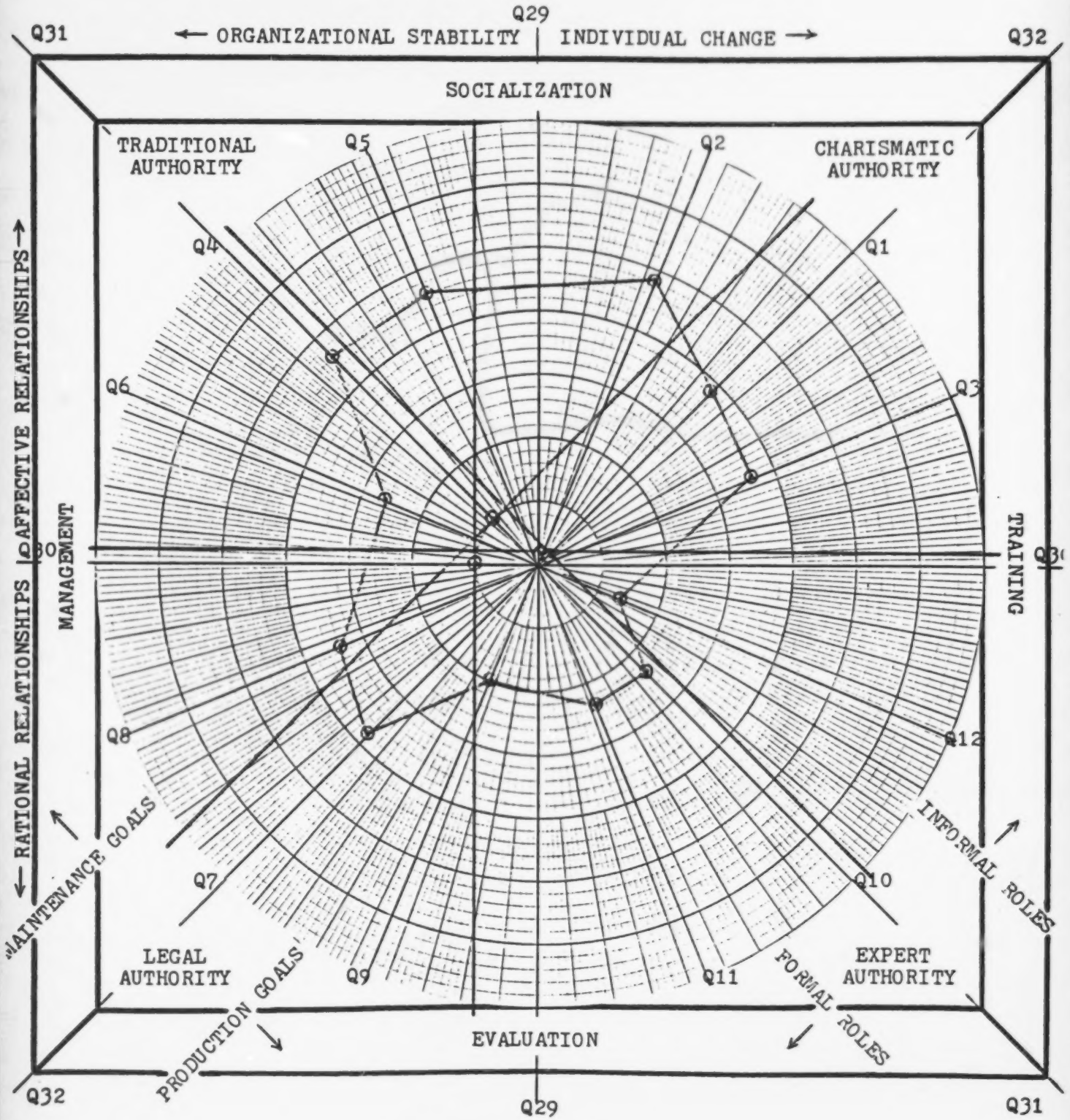

Figure 13

Is-Authority Profile of All Novice Principals Assessed by All Assessors

PRINCIPAL LEADERSHIP POWER PROFILE

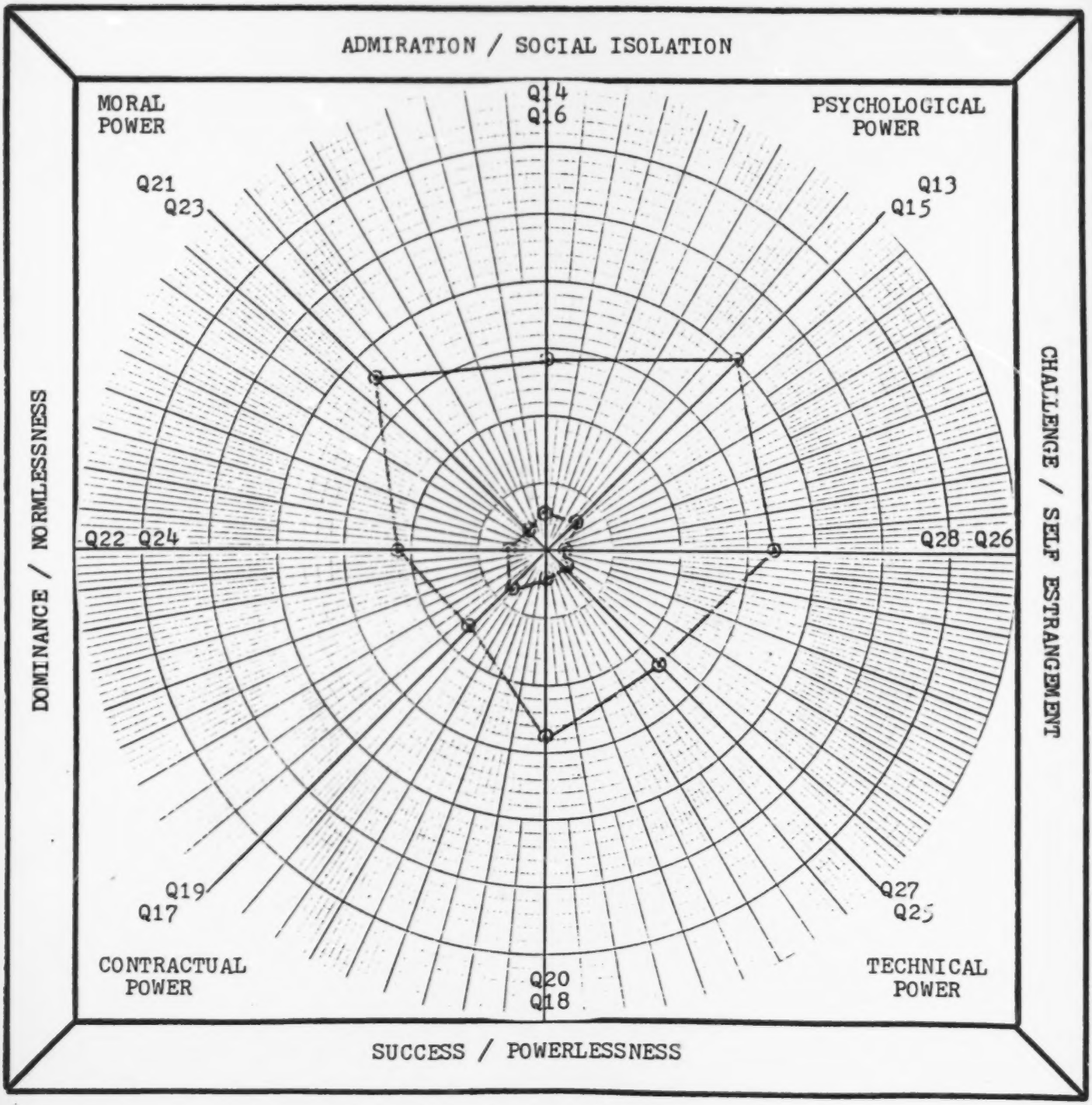

Figure 14

Is-Power Profile of All Novice Principals Assessed by All Assessors
The Outer Profile Represents Reward Oriented Power.
The Inner Profile Represents Punishment Oriented Power.

PRINCIPAL LEADERSHIP AUTHORITY PROFILE

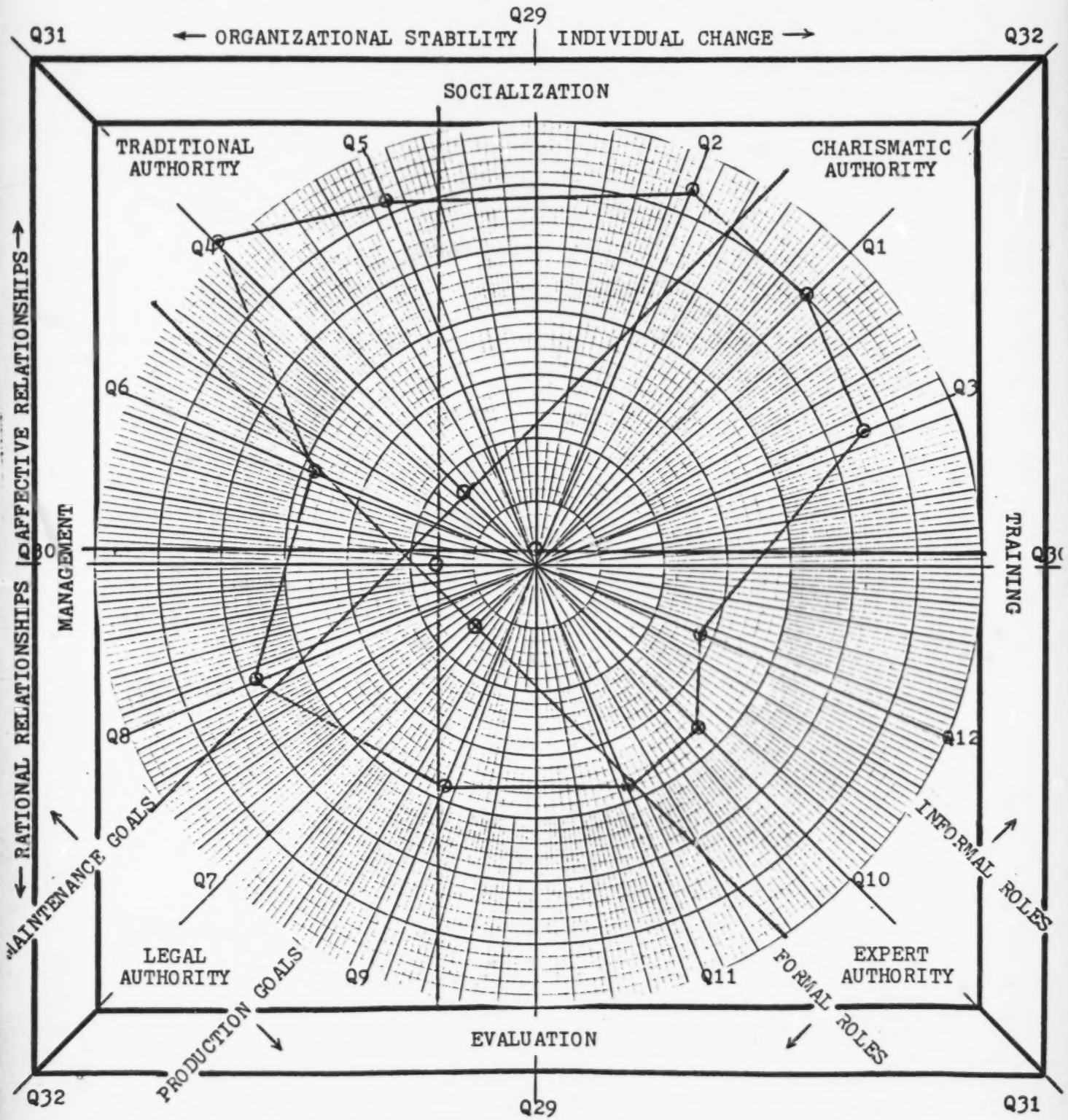

Figure 15

Ought-Authority Profile for All Principals
Assessed by All Assessors

PRINCIPAL LEADERSHIP POWER PROFILE

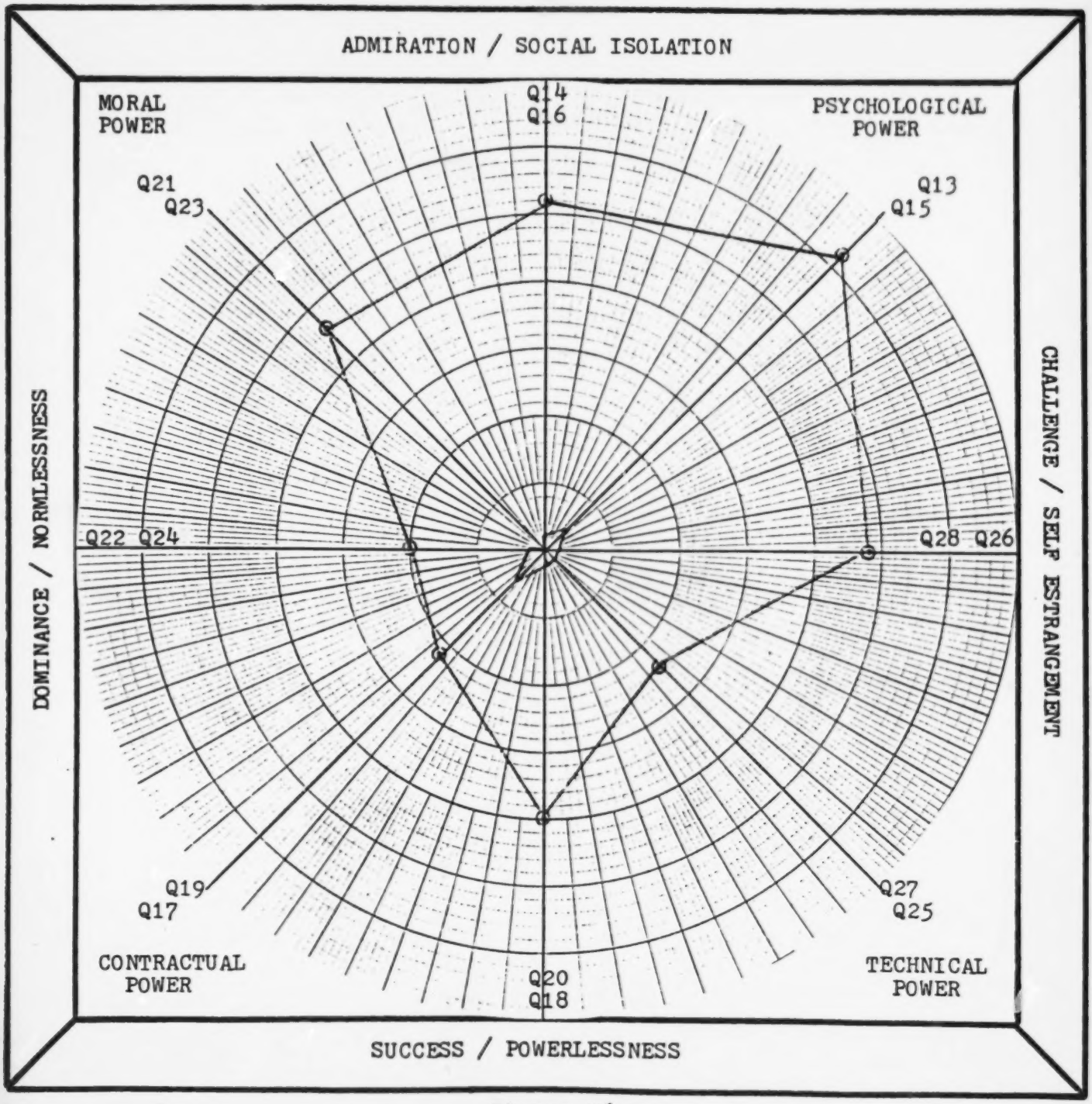

Figure 16

Ought-Power Profile of All Principals Assessed by All Assessors
The Outer Profile Represents Reward Oriented Power.
The Inner Profile Represents Punishment Oriented Power.

PRINCIPAL LEADERSHIP AUTHORITY PROFILE

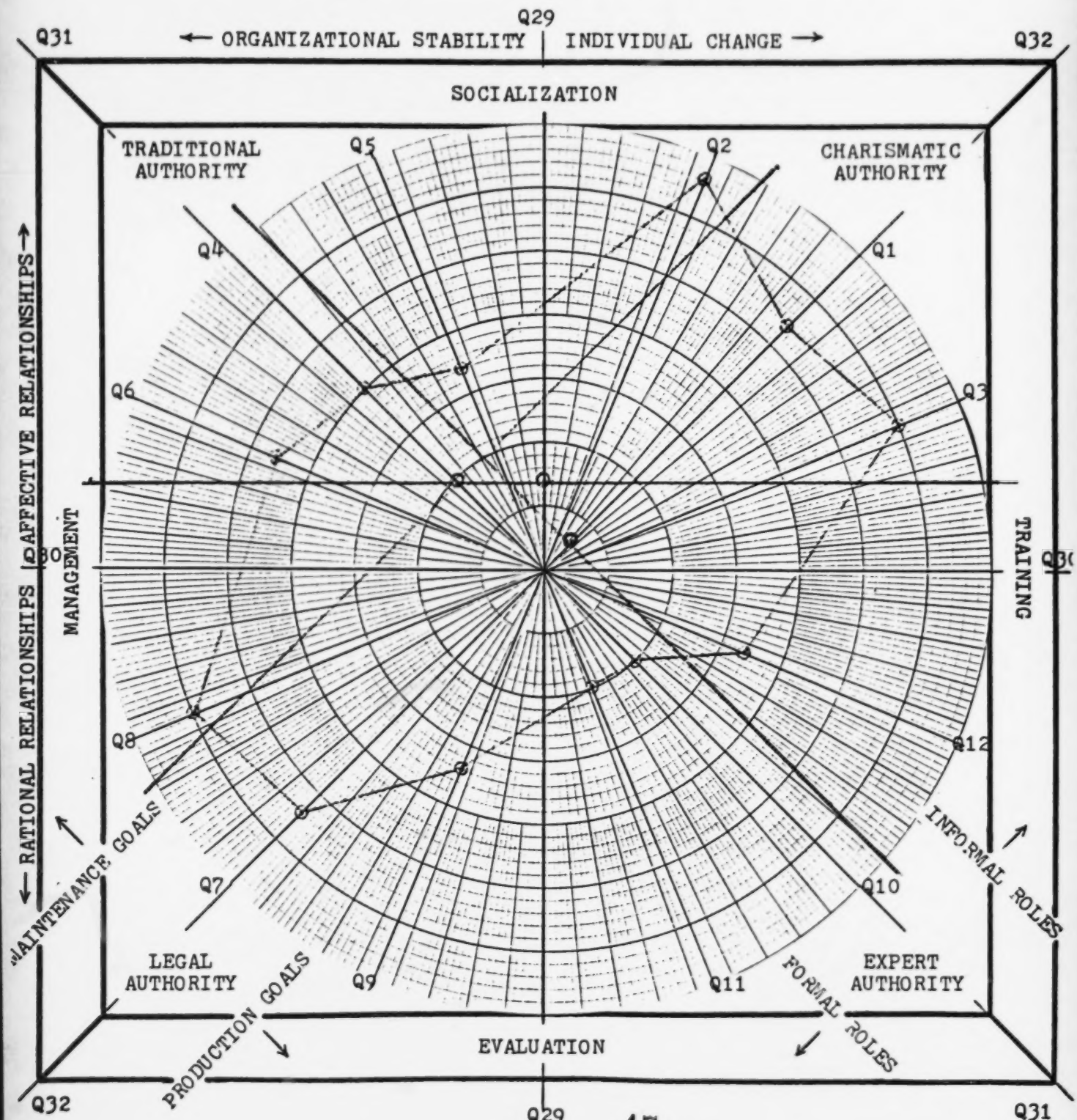

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Figure 17

An Individual Is-Authority Profile for a Male Novice Principal Assessed by a Team Consisting of a Teacher, Principal, and Central Office Staff Member

PRINCIPAL LEADERSHIP POWER PROFILE

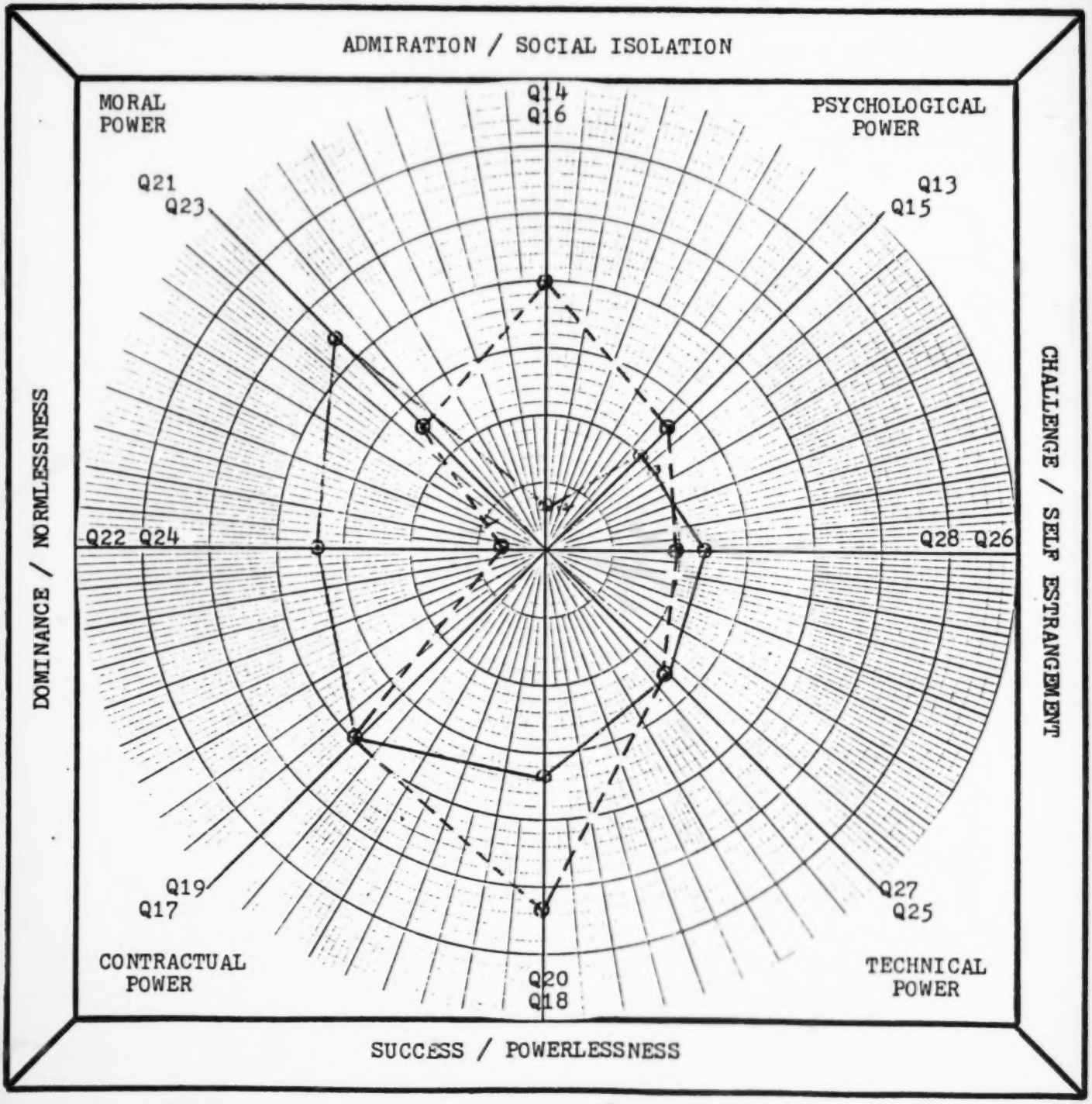
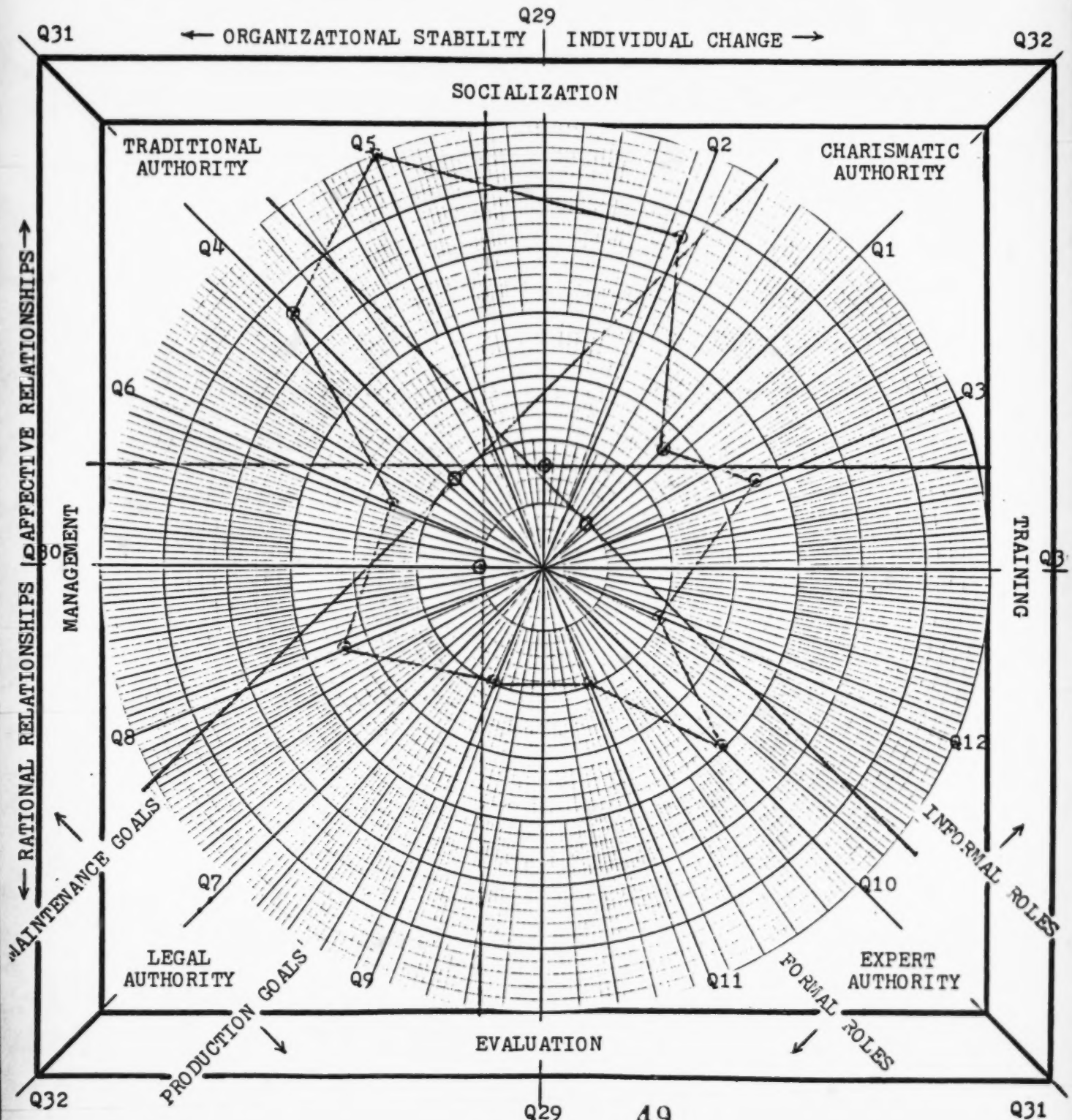


Figure 18

An Individual Is-Power Profile for a Male Novice Principal Assessed by a Team Consisting of a Teacher, Principal, and a Central Office Staff Member—The Solid Profile Represents Reward Oriented Power. The Dashed Profile Represents Punishment Oriented Power

PRINCIPAL LEADERSHIP AUTHORITY PROFILE



49

Figure 19

An Individual Is-Authority Profile for a Female Novice Principal Assessed by a Team Consisting of a Teacher, Principal, and Central Office Staff Member

PRINCIPAL LEADERSHIP POWER PROFILE

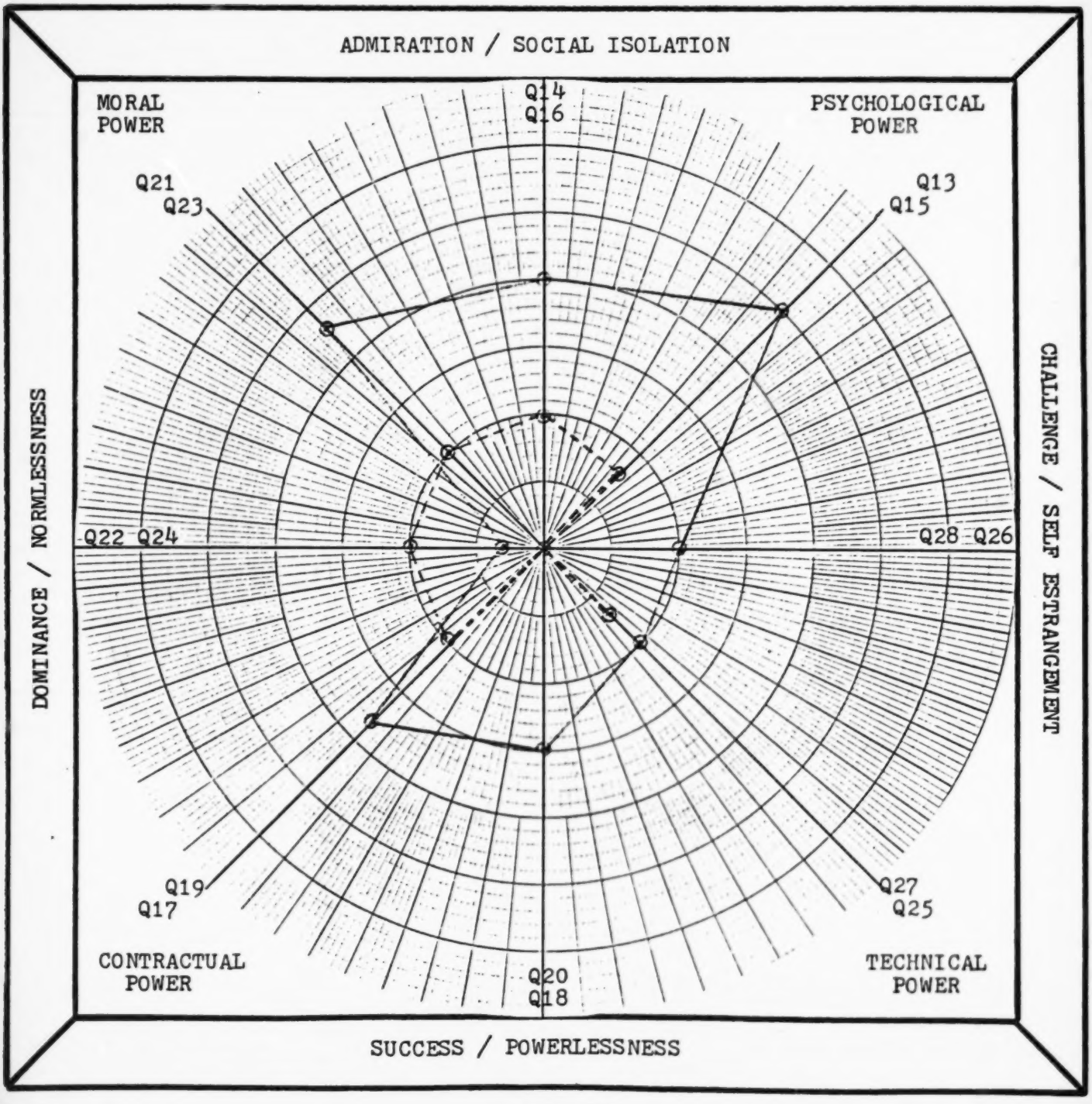


Figure 20

An Individual Is-Power Profile for a Female Novice Principal Assessed by a Team Consisting of a Teacher, Principal, and a Central Office Staff Member—The Solid Profile Represents Reward Oriented Power. The Dashed Profile Represents Punishment Oriented Power.

Appendix A

DRAFT

PRINCIPAL LEADERSHIP PROFILE

Assess the candidate's response holistically. Using the statements below, (1) assess what the candidate does emphasize to solve the problem, and (2) assess what you think the candidate should emphasize to solve the problem. In both cases, circle the number which most closely measures your assessment.

In the assessment scale which follows each statement, the numbers signify the following:

1 does not emphasize or should not emphasize as a solution to the problem

2 does weakly emphasize or should weakly emphasize as a solution to the problem

3 does moderately emphasize or should moderately emphasize as a solution to the problem

4 does between moderately and strongly emphasize or between moderately and strongly should emphasize as a solution to the problem

5 does strongly emphasize and should strongly emphasize as a solution to the problem

Please turn the page over.

Use this space to make any comments regarding the candidate's response which are not covered on the reverse and which you believe are important to note.

DRAFT

PRINCIPAL LEADERSHIP PROFILE

Candidate No: _____ Assessor No: _____

1. Developing close personal relationships with teachers.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

2. Stimulating teachers to become more professional.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

3. Encouraging teachers to become better teachers.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

4. Valuing teachers as a worthwhile group of people.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

5. Counseling teachers regarding ways to fit better into the school.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

6. Guiding teachers concerning ways better to manage their classroom work.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

7. Providing an orderly and secure school environment.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

8. Monitoring teachers' performance.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

9. Assigning teachers to appropriate grade levels, classes and duties.

   Candidate emphasizes: 1 2 3 4 5
   Candidate should emphasize: 1 2 3 4 5

10. Showing teachers ways of adequately being classroom teachers.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

11. Assessing teachers' classroom performance.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

12. Explaining ways of instructing.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

13. Making some teachers feel accepted.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

14. Making some teachers feel admired through giving praise and providing personal attention.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

15. Making some teachers feel rejected.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

16. Making some teachers feel isolated through deeming them unprofessional.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

17. Making some teachers feel autonomous.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

18. Making some teachers feel successful through giving them support and special benefits.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

19. Making some teachers feel coerced.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

20. Making some teachers feel powerless through discipline and withholding resources.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

21. Making some teachers feel important.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

22. Making some teachers feel dominant through giving recognition and control.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

23. Making some teachers feel embarrassed.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

24. Making some teachers feel misplaced (normless) through excluding them and putting them down.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

25. Making some teachers feel in control.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

26. Making some teachers feel challenged through providing resources for results and providing personal encouragement for growth.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

27. Making some teachers feel manipulated.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

28. Making some teachers have self doubts by withholding resources and variety.

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

29. Assess the candidate's approach in terms of stability and change.
(1 is stability, 3 is neutral, 5 is change)

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

30. Assess the candidate's style in terms of affective and rational (or instrumental) relationships.
(1 is affective, 3 is neutral, 5 rational/instrumental)

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

31. Assess the candidate approach in terms of formality and informality.
(1 is formal, 3 is neutral, 5 is informal)

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

32. Assess the candidate's orientation toward maintaining the school as a comfortable place and getting the teachers producing results.
(1 is maintaining, 3 is neutral, 5 is producing)

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

33. Assess the candidate's approach in terms of a positive style and a negative style.
(1 is negative, 3 is neutral, 5 is positive)

Candidate emphasizes:	1	2	3	4	5
Candidate should emphasize:	1	2	3	4	5

34. Predict the quality of the candidate's leadership ability.
(1 is ineffective, 3 is effective, 5 is very effective)

1 2 3 4 5

Appendix B

PRINCIPAL LEADERSHIP PROFILE PROJECT

Department of Educational Administration and Supervision

Currently the Department of Educational Administration and Supervision at Washington State University is investigating various aspects of administrator assessment. One aspect under study is candidate response to problems in case studies.

In the present exercise you will be asked to respond to one question regarding the case on the reverse side. The question is:

If you were Mr. Fenton, what would you do to solve the problem?

During the exercise you will have 15 minutes to respond to the question. You may refer to the case study during the exercise.

Prior to the exercise, please complete the questionnaire below and bring the completed questionnaire with you to the exercise.

Questionnaire

1. Volunteer No._____

2. Undergraduate degree:_____ 3. Major:_____

4. First graduate degree:_____ 5. Major:_____

6. Second graduate degree:_____ 7. Major:_____

8. Years of teaching experience:__ 9. Years of administrative exp.___

10. Current position:_____ 11. Grade Level:____

12. Gender:(check appropriate category) __female __male

13. Ethnicity:_____

14. Age: (optional; circle appropriate category)

20-24 25-29 30-34 35-39 40-44 45-49 50-54

55-59 60-64 65-70

All responses in this exercise will be kept strictly confidential.

PRINCIPAL LEADERSHIP PROFILE PROJECT

Department of Educational Administration and Supervision

Currently the Department of Educational Administration & Supervision at Washington State University is investigating various aspects of administrator assessment. One aspect under study is leadership. In the present exercise candidates will be confronted with the case study on the reverse side. During the assessment period of fifteen minutes, candidates will be asked to respond to two questions with respect to the case. The questions are:

(1) If you were Mr. Fenton, what would you do to attempt to solve the problem?

(2) Why would you attempt to solve the problem the way you proposed?

Your task in the exercise is to judge the leadership qualities of each candidate through the candidate's responses to the questions. Leadership qualities will be assessed employing the Principal Leadership Profile.

In order that we might characterize the assessors, please complete the following questionnaire.

Assessor Questionnaire

1. Assessor No. _____

2. Undergraduate degree: _____ 3. Major: _____

4. First graduate degree: _____ 5. Major: _____

6. Second graduate degree: _____ 7. Major: _____

8. Years of teaching experience: _____

9. Years of administrative experience: _____

10. Current position: _____ 11. Level: _____

12. Gender: (check appropriate category) _____female _____male

13. Ethnicity: _____

14. Age: (optional; circle appropriate category) 15-19

20-24 25-29 30-34 35-39 40-44 45-49 50-54

55-59 60-64 65-70

All responses in this exercise will be kept strictly confidential.